

A MECHANISM FOR RESPONSIBLE DECISION-MAKING

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ABSTRACT

The core role of Environmental Assessment Practitioners (EAPs) in Integrated Environmental Management is to make a contribution to *sound environmental decision-making processes*. Besides having to make the best possible information and knowledge available to improve environmental outcomes, EAPs have an obligation to consider the principles of the National Environmental Management Act (NEMA) when they implement the assessment process and make a recommendation to the authorities. The authorities on the other hand have a duty to demonstrate compliance with these principles when they make management decisions, or increase potential legal risk.

This paper motivates the urgency of observing these principles in decision-making and illustrates innovative ways of achieving “decisions within the framework of NEMA principles”. A mechanism that allows EAPs (assessors and reviewers) to verify that a decision has been guided by principles of sustainability is proposed.

INTRODUCTION

There seems to be general agreement that *inequity* and *environmental degradation* have become endemic to development on a global scale (Harris, 2000). These challenges have led to the adoption of the ‘new’ development paradigm, sustainable development. The South African government, recognising environmental degradation and poverty relationships, has adopted and incorporated sustainable development in the very progressive institutional framework it has developed since 1996. Key drivers for sustainable development such as democratic values, social justice and fundamental human rights¹ are firmly grounded in the country’s constitution, and an environmental right² guarantees that development will be *ecologically* sustainable, pollution and ecological degradation will be prevented and conservation will be promoted.

In 1997 Environmental Impact Assessment (EIA) Regulations (RSA, 1997b) were introduced to manage activities that may have a substantial detrimental effect on the environment. In 1998 the National Environmental Management Act (NEMA)³ was introduced as framework legislation to give effect to the environmental right. The extensive environmental law reform programme that was initiated in the late 1990’s has produced a suite of environmental laws addressing aspects such as water, biodiversity, protected areas, air quality and coastal management. The formal institutions contained in these laws are tasked with generating ‘an integrated and holistic system for

¹ Preamble of the Constitution of the Republic of South Africa (1996)

² Constitution: Section 24 of the Bill of Rights.

³ NEMA (Act 107 of 1998)

environmental management' (RSA 1997) that would be able to address inequity and environmental degradation and advance the sustainable development discourse.

The last decade has demonstrated significant progress in environmental 'system' development despite criticism and several shortcomings. Good economic growth trends were also observed during this time (The Presidency, 2005; DEAT, 2006) "...our economy is dynamic and growth is robust. The House should be reminded that the economy has grown by five percent a year since 2003" (Manuel, 2008). Noticeable improvements in the social environment are illustrated by the number of people who now have access to basic services according to the Minister of Finance. "Improvements in access to basic household services are tangible signs of progress in living standards and they broaden opportunities for economic participation" (Quintal, 2008). Environmental quality on the other hand seems to be declining. Evidence suggests that the overall condition of the environment in South Africa is deteriorating (DEAT, 2006).

Observing a downward trend in environmental quality while 'good' socio-economic ideals are pursued is an undesirable situation. The fact that a number of key institutions are not functioning as intended is further jeopardizing 'system development', increasing the risk of environmental degradation and human vulnerability to environmental change, and threatening the very ideal of sustainable development. There also seems to be agreement in some courts (RSA, 2007) that South Africa is not following a development path that meets the criteria for sustainable development.

The current situation demands that we place much more emphasis on the institutional dimension of sustainable development. By this we refer to the *system* in which sustainable development is to be progressed (Heslop, 2006) including the formal and informal rules for decision-making, the mechanisms for rule enforcement and the organisations that implement the rules and mechanisms (Spangenberg, 2002). Good environmental outcomes are dependent on the effectiveness of the system and its functional elements. We therefore need to know whether our institutions are contributing to environmental protection, and where they are not, what the reasons are for institutional neglect. Only then will we be able to facilitate improvements in environmental outcomes. Unfortunately evaluating the effectiveness of our institutions for ecologically sustainable development does not seem to receive the attention it deserves in the policy cycle, weakening our efforts in advancing Integrated Environmental Management (IEM).

This paper demonstrates the urgent need for a framework or system for monitoring institutional effectiveness for advancing IEM in South Africa. The need is demonstrated by highlighting the contributions that key institutions in NEMA make to environmental protection and sustainable development.

THE EFFECTIVENESS OF NEMA

Evaluating the effectiveness of NEMA would require an analysis of how well the Act *achieves its objects*. NEMA was promulgated to protect the entrenched environmental right. For the purpose of this paper it is important to understand that NEMA first and foremost promotes *environmental protection* and *ecologically sustainable development*. This is the principal object of the Act. While it may be argued that the objects of the Act are wider, its contents make it clear that the protection of the environment is its principal concern and principal object. This is confirmed by the definition of the environment⁴, which gives pre-eminence to ecological issues and almost as an afterthought makes allowance for "aesthetic and cultural properties and conditions".

The overarching framework or guideline that NEMA creates clearly draws attention to the fact that achieving the object of environmental protection and ecologically sustainable development would require a '*collective responsibility*' and '*collective action*'. Accordingly the Act draws attention to

⁴ NEMA (107 of 1998) S1.(1)(xi)

the manner in which citizens and government must *'work together'* to protect the environmental right granted by the Constitution. It specifically recognises that environmental sustainability is intertwined with that of poverty. This is confirmed by the Preamble to NEMA, which clearly states, "... inequality in the distribution of wealth and resources, and the resultant poverty, are among the important causes as well as the results of environmentally harmful practices". It also recognises that "sustainable development requires the integration of social, economic and environmental factors in the planning, implementation and evaluation of *decisions* to ensure that development serves present and future generations".

In order to guide the many role-players in environmental governance NEMA identifies the *key tasks* to be performed when social and economic development is pursued and it offers various *institutions* that are aimed at supporting these tasks. It then assigns the tasks to specific *institutional settings* (Spangenberg, 2002). For example, and to emphasise the focus of this paper, the NEMA underlines the need for certainty in decision-making⁵ and offers a set of principles⁶ to promote the key task of consistency – which is a key factor promoting certainty – in environmental decision-making. It assigns this task to all organs of state⁷ that are mandated to apply the principles in their actions. Evaluating effectiveness in this example would require an assessment of *the extent to which organs of state are using the principles* to achieve consistency for advancing the objects of the Act.

There are a number of key institutions in NEMA that we do not believe are functioning as intended and therefore are not contributing to environmental protection and ecologically sustainable development. For example, the performance of the Committee for Environmental Coordination⁸ (CEC) as an institution to promote the integration and coordination of environmental functions appears to be weak, and the performance of organs of state in terms of managing their policies, plans and programmes⁹ in accordance with NEMA principles needs serious improvements.

The reasons for the apparent institutional neglect are not clear. These weaknesses however do give a sense of the difficult implementation task of the country's dynamic institutional framework. There is evidence that decision-making is not governed exclusively by the formal rules or policies formally enacted by the state. The extent to which 'street level bureaucrats' bend and shape policy outcomes by the decisions they make is well known (Lipsky 1980). Research is needed into the extent to which environmental decision-making in South Africa is influenced by what we would refer to as the informal institutional landscape. By analogy with the first and second economies, we believe that there exists an informal, but very influential 'second institution', behind the formal 'first institution' that is driving decision-making. This second institution influences Lipsky's street level bureaucrats by the importance it assigns to considerations such as economic growth, job creation, political imperatives and others. In addition different decision-makers have different priorities. For examples of this consider some of the differences in environmental decisions driven by the priorities of the Departments of Environmental Affairs & Tourism, Minerals & Energy and Trade & Industry.

The only institution¹⁰ that seems to have received considerable attention over the last decade is IEM. Continuous efforts to improve the effectiveness of EIA as the most appropriate environmental management tool to ensure the integrated environmental management of activities is demonstrated by the ongoing amendments to the regulations and the 'vigorous' dialogue amongst professionals in the discipline to improve technical and procedural efficiency and effectiveness. To this end the IAIAA 2007 Conference (IAIAA, 2007) reiterated the need for *improving the practice* of Impact Assessment and emphasised, amongst other key issues, the need for *quality assurance, credibility*

⁵ Preamble of the NEMA (1998)

⁶ Chapter 1 of NEMA (1998)

⁷ See for example Sections 2, 7 (3) (e) and 13 of NEMA (1998)

⁸ Chapter 2 of NEMA (1998)

⁹ Chapter 3 of NEMA (1998)

¹⁰ In this paper we use the term 'institution' to include the system of formal and informal rules for decision-making, the mechanisms for rule enforcement and the organisations that implement the rules and mechanisms within the public and private sectors.

and accountability in impact assessment practice as well as working towards improved governance for managing natural resources in South Africa.

EIA is a key institution for achieving IEM and the objects of NEMA. Its effectiveness will however also be determined by the extent to which the NEMA Principles are used to guide EIA decisions. An understanding of the key task of these principles in the EIA process and how it currently influences decisions will contribute to the practice of impact assessment.

NEMA PRINCIPLES FOR DECISION-MAKING

Legal prescripts

The NEMA principles serve as a general framework for environmental decision-making. The *key task* of the principles is defined by the Preamble of the Act:

- Integrate good environmental management into all development activities.
- Promote certainty with regard to decision-making by organs of state on matters affecting the environment.
- Guide (and maintain) the exercise of functions affecting the environment.
- Facilitate and promote cooperative government
- Facilitate and promote participation in environmental governance

Chapter 1 of NEMA identifies the *institutional settings* that are assigned to the task:

- All organs of state *must* use the principles when exercising their functions
- All organs of state *must* use the principles when formulating environmental management and implementation plans.
- A conciliator *must* use the principles when making recommendations when an environmental conflict arises.
- The principles *must* be used when NEMA or any other law concerned with the protection or management of the environment are interpreted, administered and implemented.

Chapter 5 of NEMA promotes the application of appropriate environmental management tools in order to ensure the integrated environmental management of activities. It elaborates on the application of NEMA principles in IEM:

- Promote the application of the principles in the making of *all decisions*, which may have a significant effect on the environment.
- Impact assessment *must* promote compliance with the principles.
- Employing the modes of environmental management best suited to ensure that activities are pursued in accordance with the principles.
- Impact assessment procedures *must* ensure that the principles are taken into account in any decision made by an organ of state in relation to the proposed policy, programme, plan or project.

The EIA Regulations (RSA, 2006) that were made in terms of the above Chapter describe the procedures for the investigation, assessment and communication of the potential impact of activities. The purpose of the regulations¹¹ is to “regulate procedures and criteria for the submission, processing, consideration and decision of applications for authorisation of activities”. The Regulations make no direct reference to the NEMA principles although they do require competent authorities to “comply with the [NEMA] Act”¹² and “any guidelines that are relevant to

¹¹ R 2 of R385

¹² R 8(a) of R385

the application”¹³, to “notify” and “give reasons”¹⁴ for decisions, and that the contents of assessment reports include “an identification of all legislation and guidelines that have been considered in the preparation of the [relevant] report”¹⁵.

Despite the absence of direct reference to the NEMA principles in the content of the EIA Regulations, it is clear that they *must* be considered in impact assessment decisions. The NEMA principles are policy guidelines that are relevant to all decisions, including applications considered in terms of the EIA Regulations.

The set of principles could be interpreted as the “*desired levels of governance*” for achieving sustainable development, projecting a balanced approach aimed at avoiding irreversible damage in either dimension with equal emphasis. The principles should therefore be used both as a *benchmark* and as a *target* for decision-making. The aim of the decision-making process should then be to decide “as close as possible to the target”, in other words to integrate all the dimensions into a joint perspective of sustainable development, avoiding or at least minimizing trade-offs between the different objectives (Spangenberg, 2002).

The successful application of the principles means that the *process* and the *product* of EIA displays conformance to the “desired levels of governance”.

Institutional settings

Although NEMA principally seems to identify *organs of state* as the key institutional setting for considering NEMA principles in decision-making, the role of *EAPs* in this task should not be neglected when evaluating the effectiveness of the principles in decision-making.

The EIA Regulations identifies EAPs as a key institutional setting for managing EIA applications “... an applicant must appoint an EAP...”¹⁶ As facilitators in decision-making EAPs must have knowledge of, and comply with, the Act, the Regulations and any relevant guidelines¹⁷. NEMA confirms their role by requiring that the principles be used in the interpretation, administration and implementation of the EIA procedures¹⁸. The role of EAPs in decision-making is to ensure that the *process* of impact assessment complies with the principles¹⁹. The information that they submit to the authorities can have an important bearing on the potential contribution it makes to the *product* of assessment, namely the management decision that should deliver a good environmental outcome.

Demonstrating compliance

The effectiveness of NEMA will *inter alia* be determined by the extent to which the principles are used to advance the purpose of the Act. Measuring performance of this institution will have to consider the extent to which the principles have achieved their key task:

- Integrated environmental management into all development activities
- Promoted certainty with regard to decision-making
- Guided authority decisions.
- Promoted cooperative government
- Promoted participation in environmental governance

¹³ R 8 (ix)

¹⁴ R 10

¹⁵ See R23 (1) (e) and R29 (1) (e)

¹⁶ R 17 (1)

¹⁷ R18 (b) of R385.

¹⁸ NEMA S2 (1)(e)

¹⁹ Chapter 5 of NEMA

Assessing the effectiveness of the principles in the EIA process would therefore need to evaluate the extent to which:

- EAPs have been *guided* by the principles in the chain of decisions culminating in a final approval, i.e. screening, scoping, impact analysis and mitigation.
- EAPs have been able to *verify* that the EIA process has been informed by the principles.
- Authorities have been *guided* by the principles in review and approval of the Impact Assessment Reports.
- Authorities have been able to *verify* that they have given consideration to NEMA principles.

It is clear from the above that the assessment process needs to be supported by some sort of mechanism or ‘verification tool’ to enable the effective application of NEMA principles.

THE EFFECTIVENESS OF NEMA PRINCIPLES IN GUIDING EIA DECISION-MAKING

In an effort to provide an objective understanding of how the NEMA principles are currently being considered in the EIA process, the authors of this paper are in the process of conducting a literature review and case study analysis to obtain a representative sample of positive and negative examples of application. The result of this research will be made available in due course.

It appears that a mechanism to support the application of NEMA principles in the EIA process does not exist. Preliminary results further suggest an apparent institutional neglect: NEMA principles are not adequately considered in the decision-making process.

The De Hoop Dam on the Olifants River

The De Hoop Dam Project has been chosen subjectively to demonstrate the consequences of inadequate consideration of NEMA principles in decision-making. The project involves the construction of a large storage dam, with associated infrastructure, on the Olifants River, Mpumalanga. The project was characterized by:

- Significant environmental impacts (e.g. a centre of plant endemism that was inadequately considered resulting in a decision that become a significant threat to the environment).
- Significant conflicts between role-players (between DEAT and interested and affected parties as well as conflict between organs of state).
- An appeal that in effect resulted in the Minister ‘overturning [DEAT’s] own original RoD’.
- A revised RoD that is allowing the construction of the dam against a set of new conditions that gives better consideration of the environmental considerations of the project.

The details of the case study will not be discussed for the purpose of this paper. Its relevance lies in the extent to which the EIA and the decision were informed by the NEMA principles.

Couzens and Dent (2006) considered the project from a conflict resolution point of view and they offer insights valuable for this study. They clearly demonstrate in their account how this project treated the economic and social sustainability as independent factors in decision-making, neglecting the extent to which these are interrelated with environmental protection, causing unnecessary conflict. With reference to the NEMA principles, they highlight for example:

- That the application of the risk-averse and cautious approach²⁰ has not been taken into account properly.

²⁰ S 2 (4)(a)(vii)

- The decision did not give due regard to the needs of the environment, infringing the principle of integration²¹.
- The decision was not taken in an open and transparent manner²².
- Inadequate consideration has been given to sensitive ecosystems²³
- The principle of intergovernmental coordination²⁴ has clearly been breached.

The De Hoop Dam case study illustrates a management decision that did not pursue the “desired levels of governance” to achieve the intent of the Act – environmental protection and its relation to social and economic development – thereby contributing to the general institutional failure that causes environmental degradation in South Africa. Couzens and Dent (2006) argue that, by neglecting NEMA principles (policy guidelines) ... “many of the general objectives of IEM were paid only lip service” in this project and the “decision-maker was in breach of its legal obligations in terms of NEMA”. They also argue that “the original RoD was an inadequate document, based on a fundamentally flawed EIR” which may indicate that the EAPs in this project also neglected consideration of the principles in the impact assessment process.

The extent to which the NEMA principles have informed the process and the product of EIA can however not be assessed in the absence of a ‘verification tool’. The same authors, referring to the vague statement in the RoD that “the principles of section 2 of NEMA can be upheld” and the obvious neglect of selected principles, emphasises the need for the decision-maker to provide *evidence* that they had indeed “given consideration to all relevant NEMA principles and applied them to the particular matter; before concluding on reasonable grounds that the principles would be upheld”. We maintain that the same applies to EAPs to ensure that the process of impact assessment complies with the principles.

The significance of the outcomes of the De Hoop Dam Project is that it serves to demonstrate the risks involved in neglecting compliance with the NEMA principles. It reiterates the role of both EAPs and competent authorities in ensuring that the social, economic and environmental considerations of a project are given equal emphasis, and that the principles cannot be used in isolation to justify a course of action.

Provincial Effectiveness

The above situation is not unique. In KwaZulu-Natal the Department of Agriculture and Environmental Affairs (DAEA) acknowledges their obligation to take the principles into account in making decisions but they have no formal means (e.g. in the form of guidelines, checklists or operational policy) to apply or provide evidence that they have considered the principles in decisions (*pers comm* Felton & Kuyler 2008). They too add a ‘vague statement’ in their RoDs to the extent that they imply to have taken the principles into account. Principles are not used as key decision-factors although there seems to be an awareness of the principles, at least amongst the more experienced officials, when RoDs are being drafted.

The extents to which EAPs make use of the principles in their reports generally also appear to be weak. The following observations were offered by provincial officials:

- EAPs do not really give attention to the principles as important decision-making factors.
- They may cite the principles in reports as important institutional considerations but it is generally very broad and often very limited.
- The principles may be emphasized in some projects, and completely neglected in others. It is often ‘abused’ when projects are politically sensitive or thought to advance some other (worthwhile) policy aim to justify the project despite negative environmental trade-offs.

²¹ S 2 (4)(b)

²² S 2 (4)(k)

²³ S 2 (4)(r)

²⁴ S 2 (4)(l)

Legal and Environmental Risk

Acknowledging the limitations of this study, particularly the need for further more detailed case studies and analysis of grounds for environmental decisions, it appears as if both EAPs and authorities may be neglecting the NEMA principles as a key institution to advance the objects of NEMA.

Despite not achieving the key tasks (i.e. integration, certainty, cooperative governance, etc) the inherent risks in this situation include:

- Institutional failure that advances environmental degradation.
- Decisions being appealed.
- Other legal risks (e.g. class action and financial risks).
- Loss of political credibility.

Acknowledging that there will always be an element of risk in environmental decision-making, the suite of NEMA principles is designed to manage risk by promoting consistency (assurance) and integration. Ignoring the need to be able to provide *evidence* that the process and product of impact assessment have indeed given consideration to all relevant NEMA principles may also pose a risk. It underlines the need to develop a *mechanism* that could assist EAPs and competent authorities to manage the decision-making risks in EIA.

A MECHANISM TO SUPPORT THE APPLICATION OF NEMA PRINCIPLES

As we are concerned about institutional effectiveness for better environmental outcomes we should be developing ‘new ways’ to improve environmental decision-making or ‘how we do governance’ in the EIA process. The inclusion of sustainability principles in NEMA is a progressive step towards improving governance for managing natural resources in South Africa but the challenge is to make these principles operational.

Translating the principles into a mechanism that would improve accountability and transparency in decision-making, as we have demonstrated above, need not be a complex undertaking. The current situation in South Africa where policy generally exceeds capacity also demands that the development of a mechanism to verify compliance to NEMA principles should not become an administrative burden or a legal risk itself.

Best Practice

Procedures to facilitate cooperative environmental governance are specified in Chapter 3 of NEMA through a system of Environmental Implementation and Management Plans that are aimed to promote coordination and consistency in environmental matters amongst organs of state. The content of these plans varies according to the functions of the relevant organs of state.

Departments, whose policies, plans and programmes have the potential to significantly affect the environment, are *inter alia* required to describe in their plans how their activities would comply with the NEMA principles. To facilitate compliance with this requirement, a ‘reference framework’ had to be established against which departmental activities could be assessed (KwaZulu-Natal 2004). This reference framework translated the NEMA principles into six themes (**TABLE 1**) which enabled authorities to strategically ‘screen’ departmental policies, plans and programmes for compliance with NEMA principles.

The reference framework proved to be a practical mechanism for advancing the purpose of the procedures. Acting as a benchmark for verification it not only promoted consistency in the assessment approach, it also allowed for the identification of significant gaps in compliance.

The above reference framework offers a basic mechanism that could assist EAPs and competent authorities in their task of using the NEMA principles in the EIA process. Translating the principles into six core themes makes the principles more operational and allows for easy reporting on the extent to which the application in question promotes the principles of NEMA, thereby also linking the project to the strategic agenda of sustainable development.

To demonstrate practical application of the above reference framework, it was used to do a rapid assessment of the outcomes of the De Hoop Dam Project decision. **TABLE 1** includes excerpts from the comments and findings provided by Couzens and Dent (2006) against the themes. It serves to demonstrate the potential of using the framework as a basic mechanism to advance the application of NEMA principles. Whether this framework would have influenced the De Hoop dam EIA process and decision remains debatable. At the very least it could have highlighted conflicts with the NEMA principles that may have cautioned the decision-maker.

TABLE 1: APPLICATION OF NEMA PRINCIPLES IN THE DE HOOP DAM PROJECT MAKING USE OF A BASIC REFERENCE FRAMEWORK

THEME	NEMA PRINCIPLES	The extent to which the principles have been considered.
Sustainable Development	<ul style="list-style-type: none"> ▪ Development must be socially, environmentally and economically sustainable. ▪ Pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied. ▪ Waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner. ▪ The use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource. ▪ The development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised. 	<ul style="list-style-type: none"> ▪ <i>The need and desirability of the project was not clearly defined and sustainability of the project was questioned.</i> ▪ <i>The RoD did not mention mining interests despite 'public pronouncements that tend to feature arguments in favour of mining interests strongly; the domestic water needs of the poor less so'.</i> ▪ <i>The contending beneficiaries appear to be the water needs of the poor in the areas as oppose to undisclosed mining interests...</i> ▪ <i>The integrity of the environment will be jeopardised...the decision ignored the uniqueness of the endemic biodiversity ...</i>

THEME	NEMA PRINCIPLES	The extent to which the principles have been considered.
Participation, Empowerment and Transparency	<ul style="list-style-type: none"> ▪ The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged peoples must be ensured. ▪ Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge. ▪ Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means. ▪ Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law. ▪ The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted. 	<ul style="list-style-type: none"> ▪ <i>Interests of all IA&Ps were not taken into account properly in the initial impact assessment and decision-making process.</i> ▪ <i>A decision (RoD) was made despite six objections against the development – appeals were lodged by these objectors.</i> ▪ <i>Failure to provide proper details of what was considered in the decision-making process.</i>

THEME	NEMA PRINCIPLES	The extent to which the principles have been considered.
Cooperative Governance	<ul style="list-style-type: none"> ▪ There must be intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment. ▪ Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures. ▪ Global and international responsibilities relating to the environment must be discharged in the national interest. 	<ul style="list-style-type: none"> ▪ DEAT did not take SANParks' view (or the management policies in respect of the Kruger National Park) into account (despite objections) when they decided the application, breaching principles of cooperative governance. ▪ The project presented an appropriate case for conciliation and dispute resolution mechanisms under both NEMA and the NWA. SANParks threatened litigation against DWAF and against its own principal – DEAT. There is no suggestion that either DEAT or DWAF considered conflict resolution and conflicts were not resolved. ▪ It appears as if the Southern African Development Community's protocol on shared watercourses (international obligations) were not adequately considered, thereby ignoring and international responsibilities.

THEME	NEMA PRINCIPLES	The extent to which the principles have been considered.
Ecological Integrity	<ul style="list-style-type: none"> ▪ The disturbance of the ecosystem and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied. ▪ The disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied. ▪ The development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised. ▪ Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, 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. 	<ul style="list-style-type: none"> ▪ The dam will have a significant impact on biodiversity but the decision neglected adequate mitigation measures for environmental protection ▪ The dam will be constructed in an area of national conservation significance where at least 20 red data species occur; one of these will become locally extinct if the dam is built (draft EIR) – mitigation is inadequate, it requires DWAF to "initiate an investigation into the conservation of an equivalent area of the centre of Plan Endemism to replace that lost due the construction of the dam and its impoundment area" - ignoring the uniqueness of endemic biodiversity... ▪ The original decision concluded that the activity "will not lead to a substantial detrimental impact on the environment..."

THEME	NEMA PRINCIPLES	The extent to which the principles have been considered.
Integration of environmental considerations into decision – making	<ul style="list-style-type: none"> ▪ Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option. ▪ Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle. ▪ The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution; environmental damage or adverse health effects must be paid for by those responsible for harming the environment. ▪ A risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions. ▪ The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment 	<ul style="list-style-type: none"> ▪ The need to provide the previously disadvantaged communities with potable water was given as rationale for the project but the extent to which the people would benefit was not defined. ▪ The application did not apply a risk-averse approach – the RoD said nothing about whether the impact will be significant or not; stated that the activity will not lead to a substantial detrimental impact on the environment...the decision was not appropriate in the light of significance identified in the EIR. ▪ "The apparent lack of regard to the needs of the environment (specifically the needs of the Kruger National Park) infringed [these] principles".

THEME	NEMA PRINCIPLES	The extent to which the principles have been considered.
	<ul style="list-style-type: none"> ▪ Negative impacts on the environment and on peoples environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied. 	

CONCLUSION AND RECOMMENDATIONS

The downward trend in environmental quality in South Africa demands that we place much more emphasis on the institutional dimension of sustainable development. We need to promote better monitoring and evaluation of institutional effectiveness in our task of advancing IEM for sustainable development. Only then will we be able to generate capacity for advancing the environmental right. The absence of a framework or system to monitor institutional effectiveness in South Africa jeopardises our efforts and threatens the integrity of the environment.

The NEMA principles as a key institution for advancing the environmental right are a powerful, yet neglected decision-tool. They inform the way we should collectively be governing the environment but it appears as if this institution is being neglected in the decision-making process of Impact Assessment. Neglecting the principles will lead to flawed decision-making, increased conflict, loss of credibility, and inevitably environmental degradation.

EAPs as key role-players in the ‘collective game’ of securing ecologically sustainable development have a legal obligation to make better use of the NEMA principles. They also have an obligation to collaborate with the authorities to advance the use of principles in decision-making. The basic framework presented in this paper is an ideal mechanism to take these obligations further in a manner that does not become an administrative burden for either the EAPs or authorities.

The real value of the mechanism lies in its potential to create institutional capacity, which will improve effectiveness and the practice of impact assessment, for example:

- It will make role-players more aware of the principles, their role in decision-making and the need to make ‘balanced’ decisions.
- It will promote the objects of NEMA by making sure that the principles are used as intended.
- It will allow EAPs to ‘demonstrate knowledge of NEMA’²⁵ by using the principles to guide the assessment process and to use it for quality control.
- Authorities will be able to improve the exercise of their discretionary powers – in a manner that is consistent with the principles – and demonstrate accountability and transparency.

Recommendations:

Whether the mechanism proposed in this paper is feasible or not, EAPs and competent authorities still have an institutional obligation to consider and verify that they have considered the NEMA principles in the EIA process. In the absence of any other suitable mechanism, we believe that the basic framework, as used during implementation of Chapter 3 of NEMA, presents best practice in IEM as it has proven that it can deliver a particular outcome and it offers a practical way of addressing the need to demonstrate compliance to the principles.

In conclusion, we believe that by giving more attention to the NEMA principles in the EIA process, we will not only be improving the practice of impact assessment, it will significantly impact institutional effectiveness. As a minimum we recommend that:

²⁵ R 18 (b) of R385

- EAPs (assessors) give more attention to the NEMA principles in the EIA process and impact assessment reports.
- EAPs (reviewers) give more attention to the need to verify that they have considered the principles in their decisions, especially in sensitive projects.
- The mechanism in its current form must be tested to determine its potential for application and advancing institutional effectiveness.

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