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Protected Natural Environments In South Africa:
An Under-Utilised Opportunity To Conserve
Biodiversity

Leo Malcolm Quayle

University of Cape Town

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PROTECTED NATURAL ENVIRONMENTS

SOUTH AFRICA

University of Cape Town

**Leo Quayle
Department of Environmental and Geographical Science
University of Cape Town**

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Abstract:

South Africa has an international obligation to protect biodiversity. Much of our indigenous flora and fauna is found fragmented on land that has been utilised for purposes other than conservation. It is important that those patches of conservation worthy land be granted some form of protection. Protected Natural Environments offer the opportunity to integrate conservation with other land uses, promoting multi-functionality, and integrated land management. This paper sets out to ascertain the usefulness of this category of protected area, and at least to some extent, why it has not been employed more often.

Advantages of this type of conservation include the fact that land fragmented by development can be placed under conservation management, without infringing on the functionality of the existing infrastructure. Landowners' management responsibilities are lightened by the establishment of Management Advisory Committees. Directives issued by the competent authority are binding on the land itself, and not only on landowners, and these directives can be written into the title deeds of the property allowing for long-term conservation.

Since only five PNEs exist in South Africa, pitfalls in the proclamation procedure, and other disadvantages are examined to establish why this mechanism has not been used more often.

1. Introduction

The conservation of South Africa's indigenous biodiversity is not only a national priority, but an international obligation as well. South Africa became a party to the Biodiversity Convention in January 1997, and thus has a commitment to

*Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity
(Biodiversity convention article 8a)*

Roughly 5.5% of South Africa's land is effectively conserved in state owned conservation areas, and an estimated 11% is conserved on private land through a myriad of conservation entities (there are 24 different 'protected area' categories used to conserve private land) (Botha pers. comm., 2001) with varying degrees of success.

Much of the remaining land is private land, or land utilised for purposes other than conservation. It is thus imperative that mechanisms be implemented to effect the conservation of private land, and land where extant indigenous biodiversity is found in meaningful concentrations amongst other land-uses.

It is argued that private landowners need to be included in the conservation drive, and that initiatives to secure remnant patches of habitat (often lying between major infrastructure), be firmly established. In order for this to be accomplished, all possible avenues should be explored to integrate conservation with other land-uses.

One such avenue is the Protected Natural Environment (PNE). It is submitted however that this is a vastly underemployed mechanism for the protection of biodiversity, and one that offers many distinct advantages. This paper sets out to examine why it is that an apparently very useful mechanism is seemingly being ignored in the struggle to safeguard South Africa's natural heritage.

2. The History of PNEs

The establishment of Protected Natural Environments finds its roots in the Physical Planning Act 88 of 1967, which provided for the establishment of Nature Areas, to be used both for the enjoyment of the general public, as well as the protection, or preservation of wildlife, wild vegetation, or objects of geological, ethnological, historical or scientific interest. The concept behind Nature Areas was to impose a conservation status on privately owned land (Glazewski, 2000).

The declaration of a Nature Area resulted in the land use of the property being fixed (sec 4(2)), and the landowner being unable to change land use without the permission of the management authority (sec 8(a)(i)).

With the advent of the Environmental Conservation Act (73 of 1989) areas declared as 'nature areas' were declared Protected Natural Environments (PNEs) (ECA sec 44)

Protected Natural Environments are thus a relatively new type of protected area and they fall under category V of the IUCN's protected areas classification system, which is defined as including

'Protected Landscape/Seascape: protected area managed mainly for landscape/seascape protection and recreation.'

Their defined management objectives include the maintenance of *"the harmonious interaction of nature and culture, through the protection of landscape and/or seascape and the continuation of traditional land uses, building practices and social and cultural manifestations"*, and *"to maintain the diversity of landscape and habitat, and of associated species and ecosystems"* (IUCN website)

There are currently only five PNEs in South Africa, four of which are in the Western Cape, and four of which were originally Nature Areas –

- Langebaan PNE (WC) – Originally a Nature Area
- Rietvlei PNE (WC) – Originally a Nature Area
- Cape Peninsula PNE (WC) – Originally a Nature Area
- Lourens river PNE (WC) – Proclaimed in 1997
- Magaliesberg PNE (NWP) – Originally a Nature Area

Each of these PNEs is unique, and there exist no generic rules for what must or must not exist within a PNE other than the criteria outlined in the Environmental Conservation Act (73 of 1989).

Section 16(1) of the ECA provides for the declaration of PNEs if:

"In the opinion of the competent authority [defined as that authority to whom the administration of the ECA in that province has been assigned], there are adequate grounds to presume that the declaration will substantially promote the preservation of specific ecological processes, natural systems, natural beauty, or species of indigenous wildlife or the preservation of biotic diversity in general"

A logic similar to that of a Nature Area lies behind a PNE, that is, an attempt to impose some sort of conservation status on private land. One important difference though, is that land-use is no longer fixed. Landowners are thus less restrained in terms of the use to which they put their land. Currently PNEs are the only statutory mechanisms specifically designed to conserve biodiversity on privately owned land by means of administrative direction. This is discussed below.

The Environmental Conservation Act (73 of 1989) also lays out provisions for the management of these areas through the establishment of Management Advisory Committees (MACs) (see below).

3. PNE process

The proclamation of PNEs is a relatively untested procedure, with only the Lourens River being proclaimed a PNE. In this example, proclamation was achieved through a campaign by a community-based organization – ‘The Lourens River Conservation Society’ and the Lourens River advisory board. The process was a long and time consuming one, which spanned several years, with a large amount of time being spent trying to convince land owners to the merits of a PNE.

Once an area has been declared a PNE, the competent authority may issue directives in respect of any land or water within it, in order to achieve the general policy and objectives of the ECA. The issuing of these directives makes the PNE unique amongst private land conservation mechanisms. It enables the government to gain some control over activities happening on private land.

These directives can vary enormously, but may, for instance, relate to the control of alien plants, any form of development or change of land use (Cape Nature Conservation, 1999). A condition however exists in that provincial Ministers with authority over laws that relate to matters of environmental concern in that area must concur with the issued directives.

An important attribute of these directives is that they can (at the request of the competent authority) be written into the title deeds of the property and thus not only apply to the current property owner, but those in the future as well. This is particularly important with regard to land use change and property development. In effect the directives are binding on the property, and they are not affected by change of ownership.

It is unlikely that a premier would issue such directives unilaterally, and it is usually the landowners and the PNE motivating body who draw up the

directives themselves. This has been seen in the proclamation of the Lourens River PNE as well as in the example of the proposed False Bay Coastal Park PNE.

Once a PNE has been declared, the management of the area is assigned to the competent authority (that authority who has been charged with administrating the ECA), who may delegate that management to a local authority or a government institution (ECA sec 16(6)(a)).

Section 17 of the ECA then provides for the establishment of a PNE Management Advisory Committee (MAC), whose function it is, is to advise the competent authority (or the delegated management authority) on the control and management of the PNE. The members and office-bearers of the MAC are appointed by the competent authority, and must include -

- representatives of state, provincial and local authorities
- the owners of the land,
- the holders of real rights in the land and
- the users of the land

In this way, the management of a PNE is conducted in a negotiated manner, with the landowners, and those with rights in the land, able to participate in the management of their property. This is consistent with the principles of co-management and co-operative governance, outlined in NEMA.

4. PNEs - are they useful?

In terms of their functional usefulness, PNEs offer an opportunity to integrate open spaces with existing functions of the urban environment. It is of vital importance that critical natural processes operating within cities are maintained. Processes such as air and water purification, drainage and groundwater recharge offer services to human settlements free of charge, and should be conserved through incorporation of nature areas into a settlement open space system (Katzschner and Haider, 2000).

The PNE also allows for an integrated co-management approach to conservation, between landowners and conservation authorities. This is achieved through the establishment of the PNE Management Advisory Committee (MAC), where both landowners as well as local and national authorities are represented.

This principle is outlined in the National Environmental Management Act (Act 107 of 1998) which stipulates that:

“environmental management must be integrated, acknowledging that all aspects of the environment are linked.....and that it should pursue the best practicable environmental option” (NEMA sec 2(4)(b)).

The best practicable environmental option in terms of NEMA is defined as that option which provides the most benefit or causes least damage to the environment as a whole. Practically, in terms of remnant habitat patches found in areas not set aside for conservation, the best option is one where conservation's impact on landowners' activities is the least, while still achieving the goal of protecting valuable biodiversity. This would allow the integration of conservation with other land-uses.

As discussed above, conservation of private land is a highly important part of the national imperative of conserving biodiversity. PNEs are seen as a very important vehicle to achieve this end. They allow private land to be incorporated into legally protected areas, with little or no impact on the landowners existing land use.

This is a far more attractive option than the establishment of a formal reserve, which would effectively curtail opportunities to utilise the property to economic advantage.

The lack of specific criteria governing the proclamation of a PNE is seen as a major strength of the PNE as a route to conserving areas of mixed land use,

and a major opportunity to provide protection for biodiversity found in peri-urban areas (Katzschner and Haider, 2000). It is because of these flexible criteria, which allow economic activity to occur hand in hand with the objectives of protecting and managing the area in an ecologically sound manner, that a PNE is seen as a most useful 'vehicle' for the protection of valuable habitat or species that are located in areas already subject to other uses (The Environmental Law Consultancy, 2000).

There are no stipulations in the legislation as to what should or should not lie within a PNE. The only requirement that has to be met is that the competent authority should feel that the declaration of an area as a PNE should substantially promote the preservation of specific ecological processes, natural systems, natural beauty or species of indigenous wildlife (ECA sec 16(1)(a)).

Under these criteria, any valuable conservation worthy land is eligible to be declared a PNE.

What is just as important is what is not excluded from the PNE. The ECA refers to

“any area defined by [the competent authority]” (sec 16(1)(a)) (own emphasis).

This allows for the inclusion of major infrastructure within conservation areas as well as other land uses.

It allows remnant habitat patches and valuable biodiversity to be conserved in peri-urban areas, where housing and other developments have already disturbed the natural existence of habitat.

A good example of this is the proposed False Bay Coastal Park PNE, which would include both the Cape Flats Waste Water Treatment Works and the Coastal Park Landfill Site. According to Katzschner (2000) “The potential PNE provides an example of a possibly mutually beneficial relationship between a conservation initiative and essential service deliveries”

Also included in the proposed PNE are Rondevlei Nature Reserve, Zeekoevlei and a fairly large stretch of the False Bay coastline. The area contains the habitat of a number of rare and endangered plant species, a large number of bird species which breed at Rondevlei and use the sewage works settling ponds as feeding grounds, as well as several mammal species.

The area thus has exceptional natural qualities, but the existence of the infrastructure means that it cannot be taken over entirely by nature conservation authorities. The declaration of this area as a PNE would allow for multifunctionality on site, as well as long-term protection for important biodiversity concentrations.

The ability of a PNE to incorporate a wide range of activities under its protective umbrella has other advantages. It allows whole natural systems, which have to a greater or lesser degree been impacted by human activity to be incorporated into a protected area. Rivers are especially suitable for this. Their conservation is seen as strategically important for the country, and a national priority. Entire catchments could be proclaimed, enabling effective catchment management.

A good example would be the Lourens river, which flows through the burgeoning residential and commercial areas of Somerset West and Strand. These areas have experienced vast expansion recently, and large tracts of land have been developed for housing, commercial or agricultural (primarily viticulture) purposes. Viticulture predominates land-use in the upper catchment areas, where three large wine estates are situated. The 22 km long river was proclaimed a PNE in 1997, thus protecting the entire river system (the only one in South Africa to be protected from source to mouth), and enabling control of all activities within the river catchment (Roberts, 1997).

The PNE is thus also an extremely useful tool for conserving land in peri-urban areas. Current land uses are not curtailed in any way, allowing urban activities to continue unhindered, while important areas are protected.

Arising from an act of parliament, PNE status is such that the area is not readily de-proclaimed (Botha, 2001). The ECA does make provision for the de-proclamation of a PNE by the competent authority by published notice in the Official Gazette, and it also allows the competent authority to exclude any area from a PNE. There are however stringent conditions laid out that have to be met before these steps can be carried out. These are outlined in section 16 (1B), and stipulate that a formal consultative process is required with both management authorities as well as owners of land and holders of real rights in the land, before de-proclamation can take place.

In addition, the directives controlling land use may well have been written into the title deeds of the properties, and this is both time consuming and expensive to have reversed. A PNE is thus seen as a sound long-term conservation option.

Various PNEs have been tested by major development proposals within their boundaries. Perhaps the most prominent are Langebaan and Rietvlei, both of which withstood major development plans.

In *Corium Investments (Pty) Ltd and others v Myberg Park Langebaan (Pty) Ltd and others* Judge Rose Innes ruled against the proposed development of a cluster housing township in the Langebaan PNE, citing three reasons –

- A legal technicality concerning the devolution of authority to the administrator
- The legal requirements to advertise for public objections to the proposed development were ignored by both the Administrator, and by the Langebaan Town Clerk
- That the permit did not uphold the legal intentions of Nature Areas (now PNEs) and the principles of the Environment Conservation Act

(Case number 12799/1991, 1994)

In terms of setting a precedent for the legal protection of PNEs around the country, the latter is most significant. It reinforces the strength of PNEs as statutory protected areas.

Management advantages

Management of a PNE through the MAC would bring together various government bodies, creating a medium for communication, and facilitating integrated, co-operative governance.

Through the co-management of the PNE, management problems can be solved as efficiently as possible. Issues such as alien plant clearance, illegal dumping, future sub-divisions and control of land invasions, can be dealt with by one body rather than by individual landowners. This allows the onerous responsibility of complying with environmental legislation (such as the weed control regulations promulgated under section 29 of the Conservation of Agricultural Resources Act (CARA 43 of 1983)) to fall onto the authorities responsible for the PNE, and it relieves the landowner of such responsibility.

Development proposals are also benefited through co-management, as the pooling of knowledge concerning legislation allows for the facilitation of an efficient development process. This is especially true for environmental legislation, where the MAC would be in a good position to provide sound advice. Katzschner and Haider (2000) are of the opinion that “the MAC has assisted not hindered development proposals”

There are also financial benefits for landowners in that the ECA makes provision for financial aid in the form of grants to landowners, in order to cover expenses incurred by the landowner in complying with the directives for the PNE (sec 16(5)). These directives may stipulate management practices which the landowner outside of a PNE would ordinarily have to pay for, such as alien plant clearance.

5. PNE Pitfalls

It is important to examine the possible reasons for the fact that only five PNEs (or Nature Areas) have been proclaimed in South Africa since the Physical Planning Act was enacted in 1967.

The proclamation process

The proclamation of an area as a PNE has various pitfalls that have been encountered and may still be encountered through their application in South Africa.

A major flaw in the establishment of PNEs is the proclamation process, and the fact that government departments are understaffed, and generally cannot cope with the workload. This results in PNE proposals and directives being drafted by the proponents, or by the landowners themselves, instead of the 'competent authority' specified in the ECA. The end result is that the directives tend to be lenient. This was the case with the Cape Peninsula PNE, where the directives issued have little power to control development (Jackelman, pers. comm., 2001).

A result of this is that proclamations are usually driven by the landowners, or by residents adjacent to the area. This is not a weakness in itself. The weakness lies in the fact that the declaration of a PNE should, in applicable cases, be motivated by the existence of conservation worthy land. This should be driven by conservation authorities, acting on sound scientific evidence, with negotiations bringing about an agreed upon set of directives which are not solely the product of conservators, or the users of the land. That is not to say that internally driven PNEs are not valuable, only that many conservation worthy areas would not be voluntarily proclaimed.

The proposed False Bay Coastal Park PNE is an example of difficulties encountered in the proclamation process. The incorporation of the waste water treatment works (WWTW) proved to be a major stumbling block. The

local government waste water directorate felt that inclusion in the PNE would mean that their core functions may be restricted, and that the directives issued in respect of the PNE may limit their ability to carry out their duty as effectively as possible. It was also felt that inclusion in the PNE would limit the directorate's future land use options in respect of open land on their property.

This PNE proposal is still being negotiated, but it has been a costly, time-consuming exercise.

A further pitfall encountered by PNEs in South Africa is the MAC system, which has in the case of the Cape Peninsula PNE, fallen away, to be replaced by a committee which only convenes when required to do so. Their involvement in the management of the PNE is very limited (Jackelman, pers. comm., 2001). The MAC for the Rietvlei PNE has also fallen away, but this has been replaced by the Rietvlei Working Group, which has proven to be an effective substitute (Titmuss, pers. comm., 2001). The full benefits of integrated management have thus not really been exposed to landowners.

Although the ECA makes provision for the autocratic proclamation of PNEs and the issuing of directives, it is the view of Cape Nature Conservation, that the minister of environmental affairs would not declare a PNE against the will of the landowners. This action may be deemed as unconstitutional, and not in the spirit of public participation and co-operative governance outlined in the principles of NEMA (Hoo-Mi Sloth, 2000). The ECA does provide that the minister may only declare a PNE after consultation with landowners and those with real rights in the land. There are no cases where the minister has acted unilaterally in this regard.

Property rights

Lyster (1994) asks the question whether the imposition of directives on a private property is unconstitutional in terms of section 25 (the property clause) of the Constitution of South Africa (Act 108 of 1996), and whether the restrictions imposed by these directives constitute a deprivation or an

expropriation¹. The constitution does provide that “property may be expropriated if carried out in terms of a law of general application, and for a public purpose or in the public interest” (Glazewski and Witbooi, 2001) as could be the case if the minister of water affairs wished to protect a water resource. Section 64 of the National Water act (36 of 1998) provides that the land could be expropriated. The imposition of limitations to the use of property is a complex legal debate, and one which will be settled in time through precedents set in court rulings (Lyster, 1994).

Section 34 of the ECA is important in this regard. It provides for compensation for property owners in respect of actual loss suffered through limitations placed on the purposes for which land may be used. Thus a landowner will not be compensated for anticipated profit losses, only actual losses he/she has incurred (Glazewski 2000). Potential devaluation of a property through lost development rights would not be seen as an actual loss (Glazewski, pers comm., 2001).

This was illustrated in the case of *Minister of Public Works and others v Kyalami Ridge Environmental Association and others*, where it was held that the loss of property value through constitutional government action did not constitute grounds for an interdict against the proposed development.

“The fact that property values may be affected by low cost housing development on neighbouring land is a factor that is relevant to the housing policies of the government and to the way in which government discharges its duty to provide everyone with access to housing. But it is only a factor and cannot in the circumstances of the present case stand in the way of the constitutional obligation that government has to address the needs of homeless people, and its decision to use its own property for that purpose”.

(Chaskalson, 2001)

¹ Expropriation implies that some form of compensation is due to the

The possibility of losing one's property rights, is seen by landowners as a strong argument against inclusion in a PNE.

Directives

This again raises the question of how stringent directives should be. If strict anti-development directives are issued, conservation interests are better served, but the rights of landowners are further impinged upon, and further restricted. In the light of the fact that it is generally the landowners themselves who draft the directions, the general trend one would expect would be towards less stringent directives, retaining landowner's future land use options. Also strict directives would deter landowners who may wish to conserve their land.

The question is thus one of a balance being struck between imposition of restrictions, and taking landowner's concerns seriously enough to lay their fears to rest.

This has not always been the case with the proclaimed PNEs in South Africa. Several of these PNEs have had no directives issued at all, whilst others have drafted very weak directives that are in effect 'toothless' when restricting development.

Neither the Langebaan nor the Magaliesberg PNEs have issued directives, and the Cape Peninsula PNE's directives have little power to control development. This is illustrated by the fact that several development proposals lodged for the Farm 1024, Cape Point (the land surrounding the cottages at Smitswinkel Bay), have been turned down solely due to the zonation of the land as 'rural' (Gosling, 2001). If a PNE is to be useful as a conservation tool, development proposals should be governed fairly strictly by the directives issued.

This case does however serve to underline the importance of zonation of open spaces. This is the fundamental mechanism governing the use to which

landowner, while deprivation does not require compensation.

land is put. It is in itself a valuable conservation tool, which should underlie all nature areas. The strength of a conservation or open space zonation is based in the 1997 regulations governing activities considered to have a detrimental effect on the environment, promulgated under section 21 of the ECA. These regulations stipulate that before land can be re-zoned from use for Nature Conservation or zoned open space, to any other land use, an impact assessment is required to be performed by an independent consultant (sec2(e)).

The zoning of land as open space is thus an important fall back that ensures land is adequately reviewed before any development can take place upon it.

6. Conclusion

In general, the conservation of biodiversity in South Africa has reached a stage of awareness, where it receives far greater attention from decision makers. The establishment of a PNE not only provides an area with statutory protection, it also illustrates recognition that the area has something unique and valuable to offer. This adds a strong emotive element to an area's protection, especially in the light of the constitutional environmental clause, which illustrates a clear intention (on the part of the government) to elevate the environment to a level requiring more attention.

It is concluded that PNEs are indeed a useful tool for conserving biodiversity in South Africa. Their strength to withstand attempts to compromise them has generally proved adequate as was illustrated in the Langebaan as well as the Rietvlei examples.

They enable the protection of developed areas that contain infrastructure that would prevent Nature Conservation Authorities from taking management of the area. The PNE allows this to happen, without operators of economic activity losing control of their assets.

Issues that stand in the way of PNEs are of such a nature that they are readily addressed through a co-operative management approach. These include development limitation (property rights), which can be negotiated to suit all parties, and the landholders concern over loss of management control of their land.

Perhaps the most valuable characteristic of a PNE is its flexibility, and its uniqueness. This allows individual circumstance to be accommodated in the proclamation process, and a unique protected area to be established which takes into account the individual requirements on the land and landowners concerned.

The stringency of directives is an issue that may provide some concern for those more conservation-minded people. Since they are drafted by (or in conjunction with) the landowners, some may feel that they may not offer the protection the land is deserving of, as is the case with the Cape Peninsula PNE. This is a valid point, but one which may need to be overlooked, if landowners are to be drawn into the PNE process.

A PNE is indeed a very useful mechanism for protecting fragmented habitats, but one that requires a committed driving force to ensure proclamation. Perhaps the fundamental flaw in the process is the fact that it is generally left up to landowners to drive the process. This fact, in conjunction with landowners' perception that they would be surrendering property rights, means that the PNE remains an under-utilised conservation tool.

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