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CHAPTER REVISION INFORMATION

Date Signed	Rev.	Remarks
April 2015	0	Sub-Revision 1: 18 July 2014 Included the comments received on 19 June 2014 from CoCT and CapeNature. Sub-Revision 2: August 2014 Included comments received from formal review from Eskom, CapeNature and CoCT. Sub-Revision 3: 20 April 2015 Included updates and comments received from the public review.

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1. BACKGROUND

1.1 PURPOSE OF THE PLAN

The Management Plan for the Koeberg Nature Reserve protected area is a strategic document that provides the framework for the management of the land regarded as the Nature Reserve. The purpose of the management plan is to:

- Ensure the integration of the management of the nature reserve and the Koeberg Nuclear Power Station (KNPS), as to ensure the continuous operation of the KNPS, without significant negative impact on the biodiversity value of the site;
- Enable Eskom Holdings SOC Limited (hereafter “Eskom”) to maintain and manage the Koeberg Nature Reserve in such a way that the purpose for which was established is protected;
- Provide the primary strategy tool for management of the Koeberg Nature Reserve, informing the need for specific programmes and operational procedures;
- Clearly define objectives and activities to direct the protection and sustainable use of its natural, scenic and heritage resources, as well as the intends to focus its efforts in the each 5 years review cycle;
- Provides the medium-term operational framework for the prioritised allocation of resources and capacity in the management, use and development of the reserve;
- Facilitate capacity building, future thinking and continuity of management; and
- Comply with the requirements of the NEM: Protected Areas Act (2003) to develop a Management Plan.

It must be noted that the management plan focuses on strategic priorities and does not detail all operational and potential reactive courses of action in the next five years. The timeframe referenced in the Strategic Implementation Framework follows financial years (1 April to 31 March), with Year 1 commencing from signing of the management plan by the MEC. While planning for some emergencies is part of the management plan, it remains possible that unforeseen circumstances could disrupt the prioritisation established in this management plan. These should be addressed in the annual review and future updates of the management plan.

The Koeberg Nature Reserve management plan has been compiled on the basis of current available resources, funding and human capital. Legislation listed in the Strategic Implementation Framework is non-exhaustive.

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1.2 STRUCTURE OF THE PLAN

The management plan for the Koeberg Nature Reserve has the following structure:

Chapter 0:	Authorisation and configuration control.
Chapter 1:	Provides background on the purpose of the management plan, as well as the purpose and value of the Nature Reserve.
Chapter 2:	Provides a description of the Nature Reserve, as well as the ecological and legal context of the Nature Reserve.
Chapter 3:	Sets out the Strategic Management Framework, including the key environmental aspects and objectives for the Nature Reserve.
Chapter 4:	Describes the Operational Management Framework, including the administrative structure, zonation of the Nature Reserve, outlining the land uses in particular zones.
Chapter 5:	Describes the Operational Management, including the management targets and programmes for managing the Koeberg Nature Reserve.
Chapter 6:	Sets out the monitoring measures required to determine if management targets are being met.
Chapter 7:	Describes the components that must be included in the Annual Plan of Operation.

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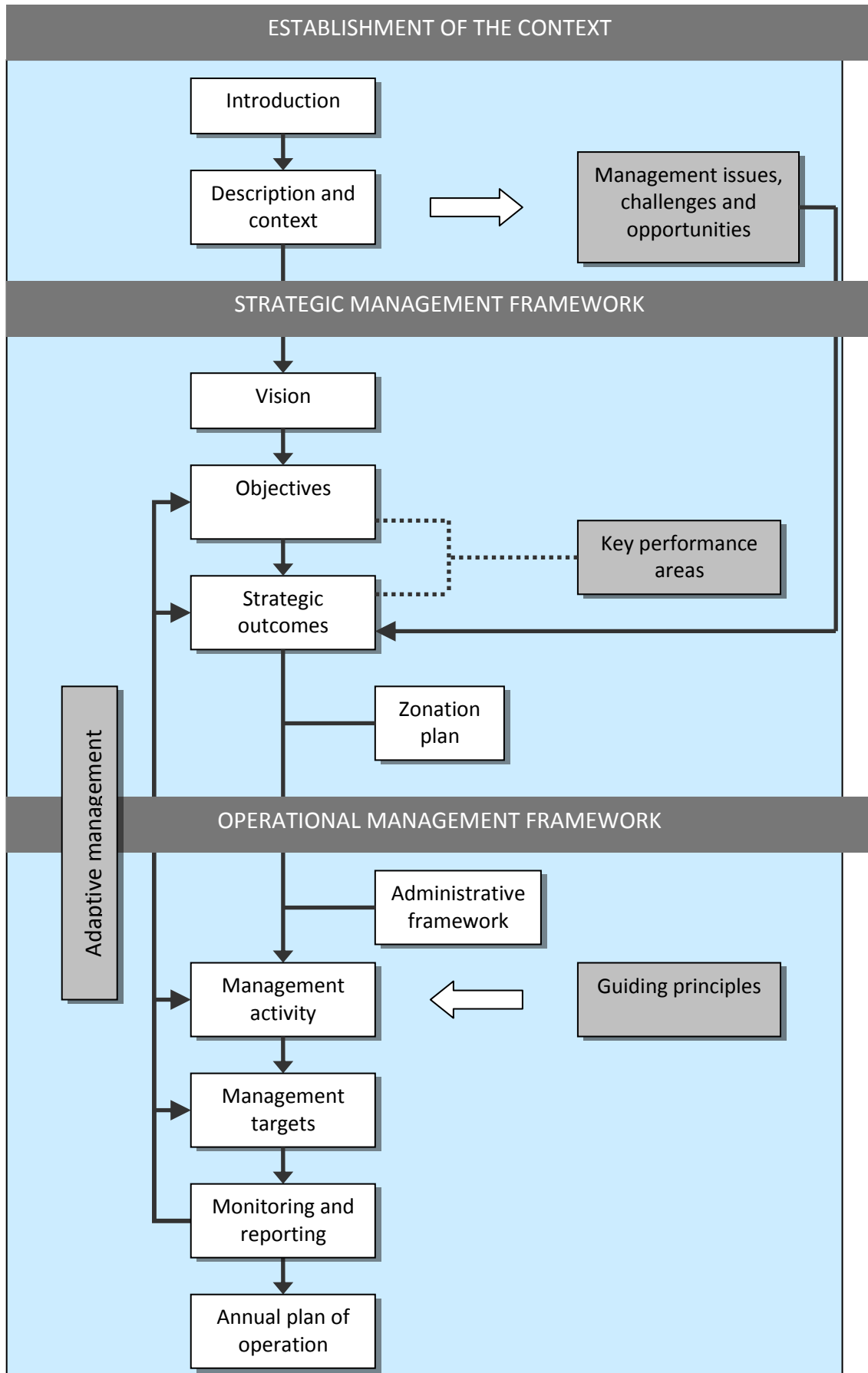


Figure 1-1 Structure of the Management Plan

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1.3 INTRODUCTION

The KNPS, its supporting facilities and the surrounding properties, are located approximately 30 km north of Cape Town’s CBD along the R27 West Coast Road and approximately 10 km southwest of the town of Atlantis. The KNPS, its supporting facilities and the Nature Reserve and is made up out of 5 properties legally owned by Eskom as shown in Figure 1-2.

The outer boundaries of the Nature Reserve is surrounded a private nature reserve (northeast) – Witzands Aquifer Nature Reserve, the R27 West Coast Road (east), the Duynefontein residential area (south) and the Atlantic Ocean (west). The area incorporates a number of environments which includes small wetlands, coastal dune fields, strandveld dune vegetation, sand plain fynbos as well as areas infested with alien vegetation. The Nature Reserve is situated within the City of Cape Town Metropolitan Municipality: Blaauwberg.

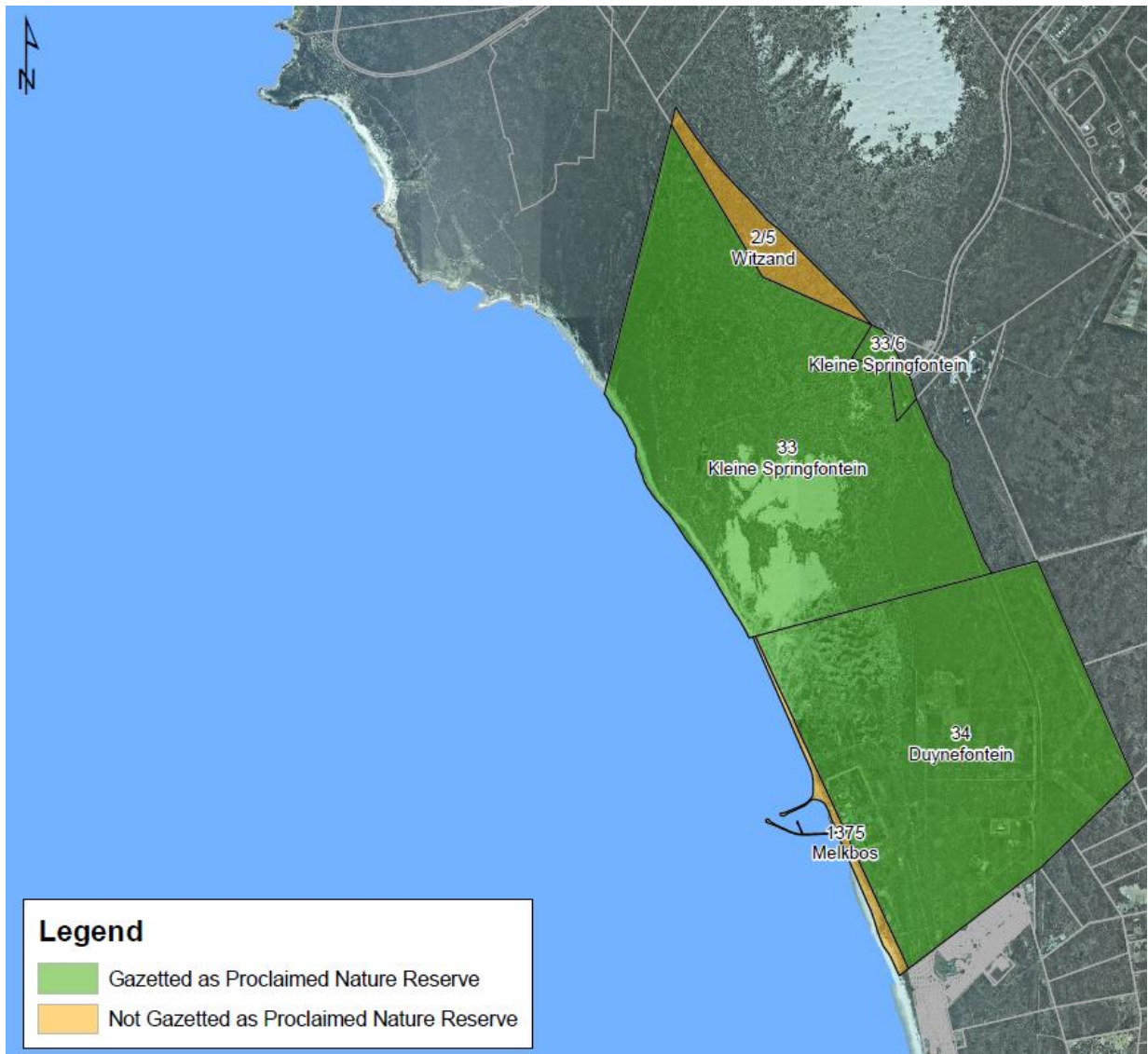


Figure 1-2 Eskom owned land covered by the Management Plan

The primary drive for proclaiming the Nature Reserve was to support the operation of the nuclear power station while conserving the natural habitat as far as possible and providing a buffer area surrounding the KNPS and maintaining land for future development in a sustainable manner.

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1.4 VALUES OF THE KOEBERG NATURE RESERVE

The values of Koeberg Nature Reserve are described in Table 1-1 below. The values are important in planning and management, as they are the aspects of the place that must be protected.

Table 1-1 The Values of the Koeberg Nature Reserve

Strategic	Integration of a current and potential future industrial facility within a conservation area.
Natural Values	<p>Vegetation, Dune Systems, Wetlands and Aquifers:</p> <p>Presence of vegetation types which are of conservation value:</p> <ul style="list-style-type: none"> - Cape Flats Dune Strandveld with transverse and parabolic dune subtypes; - Atlantis Sand Fynbos; - Cape Seashore Vegetation. <p>The Koeberg Nature Reserve has various unique seasonal and artificial wetlands.</p> <p>There are two aquifers present within the Koeberg Nature Reserve:</p> <ul style="list-style-type: none"> - Aquifer 1: Primary Sandveld Aquifer; - Aquifer 2: Malmesbury Aquifer. <p>The presence of key species that require protection.</p>
Ecosystem Values	<p>Acknowledging the conservation value of the Koeberg Nature Reserve to the western leg of the bigger conservation initiatives of the Cape West Coast Biosphere.</p> <p>Habitat provision for refuge animals and plants, and also serves as nesting area for a number of birds.</p> <p>Purification: Dunes act as filtration for water into the aquifer. The mobile dune system is important deposition cycle for this section of the coastline.</p> <p>Cycling Processes: nutrient cycling, nitrogen fixation, carbon sequestration, soil formation.</p>
Educational and Recreational Values	<p>Intellectual inspiration: The nature reserve is used by a number of students to conduct research. School groups visit the nature reserve as part of educational programmes.</p> <p>Contribution to local economy: Job creation via service contracts and permanent employment.</p> <p>The Dikkop and Grysbok Hiking Trails: Varies from 2.5 km to 22.3 km taking the hiker through widely varying terrain, and one can experience the splendour of the many moods of the West Coast.</p> <p>The Mountain Bike Trail: The trails lead the visitor through two naturally occurring veld types. On the route there is a bird hide where birds can be viewed from.</p> <p>Recreational experience: The nature reserve and its trails are open to the public and have 3 annual events;</p> <ul style="list-style-type: none"> - Fundraising is held for the Local Melkbosstrand NSRI. The 4x4 track is being used for this event. - Annual Koeberg 15 km Fun Run in February. <p>Annual Koeberg Cross Country League event in June/July.</p>

1.5 PURPOSE OF THE KOEBERG NATURE RESERVE

The purpose of the Koeberg Nature Reserve is to:

- maintain an environment in which the KNPS can continue to operate and possible future nuclear development can occur in a sustainable manner, whilst conserving the surrounding environment for the benefit of the community;

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- maintain an environment in which educational and recreational development can continue, within the context of the KNPS and its conservation objectives;
- protect an ecologically viable, representative area of vegetation types present and its associated biodiversity;
- protect the ecological integrity and functioning of wetlands, and their catchments;
- protect the biodiversity of the area; and
- provide sustainable access¹ by the public to the area and its resources.

1.6 ADAPTIVE MANAGEMENT

The preparation of this management plan has been undertaken based on the guiding principles of adaptive management, which is a structured, iterative process in which decisions are made using the best available information, with the aim of obtaining better information through monitoring of performance (Figure 1-3). In this way, decision making is aimed at achieving the best outcome based on current understanding, whilst accruing the information needed to improve future management. Adaptive management can lead to revision of a part or if necessary the whole management plan.

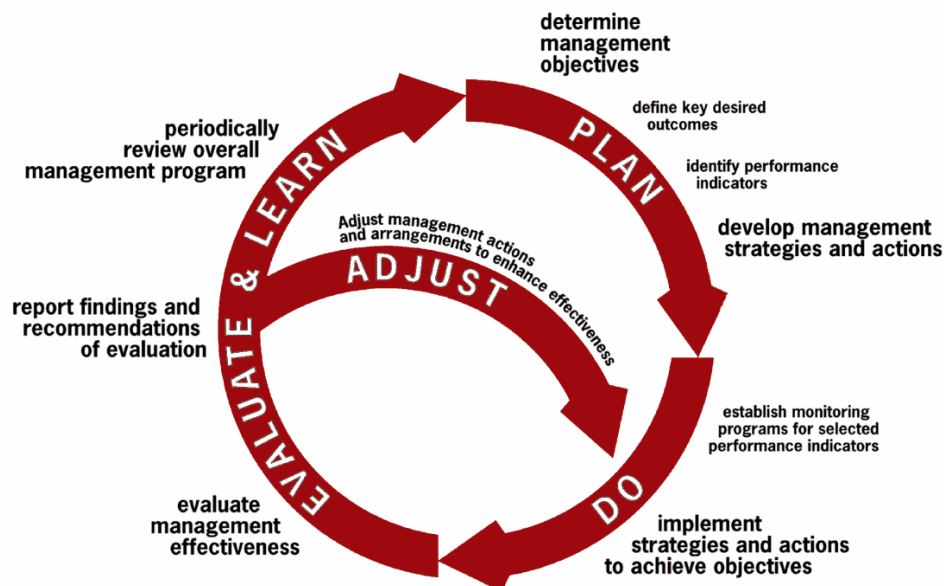


Figure 1-3 The adaptive management cycle (Management Strategy Evaluation, 2009)

Adaptive management enables landowners and managers to:

- Learn through experience.
- Take account of, and respond to, changing factors that affect the biodiversity stewardship site.
- Develop or refine management processes.
- Adopt best practices and new innovations in biodiversity conservation management.
- Demonstrate that management is appropriate and effective.

¹ Access is controlled by Koeberg Security and access may be restricted for security or other reasons where there might an impact on the KNPS.

1.7 CONSULTATION

Stakeholder involvement and support is an important aspect of effective protected area management.

Since the Koeberg Nature Reserve is already established at the time of developing this management plan limited stakeholder engagement was required. For this reason only the national authority, the provincial nature conservation authority namely CapeNature and the local nature conservation authority namely the City of Cape Town were involved.

Consultation in drafting the management plan has been undertaken through a series of meetings and discussions and workshops with the national Department of Environmental Affairs (DEA), CapeNature and the City of Cape Town, as shown in Table 1-2.

Table 1-2 Stakeholder engagement

Date	Engagement	Authority
23 November 2010	Appeal Decision: Condition 1.46 to develop a management plan for the Nature Reserve and enter into a Stewardship Agreement with CapeNature.	Department of Environmental Affairs and Tourism (DEAT)
17 November 2011	Meeting with CapeNature	CapeNature
28 February 2013	Comment on the Draft EMP (Nuclear Sites)	CapeNature
14 October 2012	Meeting with CapeNature	CapeNature
January 2014	Discussion on zoning and stewardship requirements for the Nature Reserve	CapeNature
February 2014	CapeNature to present Nature Reserve zoning, etc. to DEA.	CapeNature, DEA
19 June 2014	CapeNature and CoCT workshop on the Draft Management Plan. Stewardship Agreement Discussion	CapeNature, CoCT CapeNature
August 2014	Final review by CapeNature and CoCT	CapeNature, CoCT
February – March 2015	Public review of the Draft Koeberg Nature reserve Management Plan	All Interested and Affected Parties.

The review of the draft Koeberg Nature Reserve Management Plan was advertised in the following newspapers:

- D-Town Issue 6, January 2015
- TygerBurger Table View on Wednesday, 4 February 2015;
- TableTalk on Wednesday, 4 February 2015; and
- WeskusNuus on Tuesday, 10 February 2015.

Hard copies of the draft Management Plan were made available for review to all interested and affected parties (IAPs) at the following locations:

- Eskom Website;

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- Koeberg Public Library, Duynfontein; and
- Koeberg Nature Reserve Visitors Centre, KNPS, Melkbosstrand

The following comments were received during this period, and the responses

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Table 1-3 Details on the registered IAPs, the comments received and the responses

Detail of IAPs	Comments Received from IAPs	Eskom Response
<p>Helene van der Westhuyzen, Conservation Services Manager, CapeNature, 12 August 2014</p>	<p>The Western Regional Ecological Support Team represented by Lee Saul and Natalie Hayward, as well as Rhett Smart (Scientific services Land Use Advisor) have read the management plan and consider it comprehensive and well structured. The clear layout and structure of the document is appreciated and easy to follow. Comments and corrections are discussed below.</p>	<p>Noted.</p>
	<p><u>General Comments</u></p> <p>The management plan carries a strong sense of Eskom’s overall environmental Policy and commitment to its policy in various portions of the document. The desirability for potential development is understood and is clearly defined throughout the document</p> <p>However, despite development plans or opportunities that may be viable, a management plan for a nature reserve that emphasis the conservation of its biodiversity is likely to be well aligned with the outcomes of an environmental authorisation. Thus, the nature reserve first and foremost purpose and objectives should be to: ‘protect and ecologically viable, representative area of Fynbos and its associated biodiversity; protect the ecological integrity and functioning of wetlands, their catchments; protect the biodiversity of the area; and provide sustainable access by the public to the area and its resources.</p> <p>Closer alignment could also be demonstrated between the reasons for conservation of this area and the reasons for proclaiming a nature reserve as outlines in NEM:PAA. This is not always clear as there is an over emphasis as to development need for the site and not enough focus on the intrinsic conservation value of the area. These two points ate not in conflict as has been demonstrated in the document, but the conservation value of the site is always stated as a means to facilitating development and not as a stand-alone value.</p> <p>Furthermore there is a disjoint between the values listed for the reserve and the ecological context of the reserve, and these should be more aligned. The Koeberg NR appears to support a variety of West Coast endemics, which is significant but</p>	<p>With reference to the Management Plan the focus and the purpose of the Koeberg Nature Reserve and its Management Plan will maintain to ensure the integration of the management of the nature reserve and the Koeberg Nuclear Power Station (KNPS), as to ensure the continuous operation of the KNPS, without significant negative impact on the biodiversity value of the site and to enable Eskom Holdings SOC to maintain and manage the Nature Reserve in such a way that the purpose for which was established is protected.</p> <p>Although the Management Plan makes reference to needed development within the boundaries of the Nature Reserve, it is highlighted that developments will take place in a sustainable manner and will be in line with all relevant legislation such as, but not limited to, the National Environmental Management Act No. 107 of 1998 (as amended) and its Environmental Impact Assessment Regulations (2010). All developments and it locations will be subject to an environmental authorisation process governed by the abovementioned legislation.</p>

<p>not mentioned. Chapter 1 in essence nullifies Eskom's commitment to its environmental policy and the Koeberg NR, including the structures and resources that have been investigated in this reserve over the years, and undermines the opportunities created by this reserve.</p> <p>Considering the significance of the site in terms of electricity provision and conservation value, more clarity is required around the information/methods used to select site sensitivity. It appears that tall thicket or parabolic dunes and dwarf thicket in the north are excluded however, it is unclear as to why, or what constitutes combined sensitivity, referred to in Chapter 2 and Table 4-2. The conservation and maintenance of ecological infrastructure can only benefit proposed/planned development in the services that they provide.</p> <p>The management plan makes extensive reference to needed development, and development that is being considered, however, there is no point of reference to this suggested development in the introductory or contextual stages of the management plan. It is concern that Operational Management, 'Combining conservation /operations activities dictates only 6 lines to the vague management of new developments. A list of proposed development is provided in Chapter 4, however there is no special context provided. This should be more clearly captured in the concept development framework for the reserve as required by NEM:PAA.</p>	
<p>Below are more detailed, per chapter comments regarding the management plan:</p> <ul style="list-style-type: none"> - Chapter 0, pg. 6: Abbreviations list is incomplete, particularly for the facilities of the site - Chapter 1 pg. 6: Ecosystem Values: The mobile dune system is important for the erosion and deposition cycle for this section of coastline - Chapter 1 pg. 7: Maybe better to replace 'Fynbos' with 'vegetation types present' in the first line <p>The background into section (Section 2.4) comes from the EIA specialist studies for Nuclear-1, so the info is detailed enough and from a reliable source. Barry Low did the vegetation specialist study, I am not sure about the freshwater and fauna.</p> <ul style="list-style-type: none"> - Chapter 2, pg. 15: According to the Mucina and Rutherford, Cape Flats 	<ul style="list-style-type: none"> - Chapter 0: The List of Abbreviations has been updated to include any outstanding abbreviations, as requested. - Chapter 1: The Ecosystem Values listed in Table 1-1 has been updated include the importance of the mobile dune systems. <p>All references on the Nuclear 1 EIA specialist studies were updated to reflect the relevant specialist who conducted the studies.</p> <ul style="list-style-type: none"> - Chapter 2: All references to specialist studies conducted within the boundaries of the nature reserve made in this chapter has been included and updated where required. Section 2.4.4 has been included to provide detail on the dune systems within the Nature Reserve. All references to the Cape Flats Dune Strandveld

<p>Dune Strandveld falls with the Fynbos biome, not thicket, although Strandveld does contain many thicket elements. I think that Low and Rutherford as the standard text in my opinion for consistency.</p> <ul style="list-style-type: none"> - Chapter 2, pg. 21: Would be useful to add the NEMBA listed ecosystems status: Atlantis Sand Fynbos – Critically Endangered; Cape Flats Dune Strandveld – Endangered; Cape Seashore Vegetation – Least Threatened. - Chapter 2, pg. 25. Should indicate which of the mammals have been introduced e.g. gemsbok blue wildebeest (mention here that there will be a separate game management plan) - Chapter 2, pg.26. Socio-economic context can be expanded without being a motivation for further development. - Figure 4-2 and Figure 4-4: The Disturbed/Transformed Area Overlay (Figure 4-4) is an overlay on the Conservation Zone. Therefore the Conservation Zone map (Figure 4-2) should include these areas. - Figure 4-7: Should include labels indicating what each of the facilities are - Chapter 4, pg. 16: Should include no plant picking without a permit under visitor activities (along with no fishing etc.) - Chapter 4, pg. 19: Check if the GIS alternative fir the proposed Weskusfleur Substation is not actually within the developed zone - Chapter 5, pg. 7: 5.2.1. Fire Management: Need to understand the fire regime requirements for the vegetation types on the site. The sand Fynbos does require fire and 30 year would be old veld – many species e.g. Proteaceae will be affected by lack of the fire. Strandveld is less fire dependent. The difficulties related to the presence of many power lines and risks of flashovers is understood. This section needs more discussion. Refer to the vegetation management plan for the approved Dassenberg 132 kV line (referred on pg. 19, Chapter 4). The maintenance of the powerline servitudes also needs to be addressed. - Chapter 5, pg. 10: Controlled burns only as a last resort – needs to be discussed further. 	<p>vegetation type has been updated as per recorded by Mucina and Rutherford (2006).</p> <ul style="list-style-type: none"> - Section 2.4.8.3 has been updated to indicate game species introduced to the Nature Reserve. And section 2.4.10 has been updated as requested. - Chapter 4: Figures 4-2, 4-4 and 4-7, with the addition of Figure 4-6, have been updated as suggested. The Conservation Zone Objective and the suggested “no plant picking” has been updated in Table 4-6. - The proposed developments listed in Table 4-8 has been updated, and addresses the comment on the location of the Weskusfleur Substation. - Chapter 5: Fire Management (Section 5.2.1 and Table 5-4) - Fire regime requirements: Eskom recognises the fire regime requirements for the vegetation types within the Nature Reserve. It is Eskom’s objective to not allow any fires underneath powerlines or fires near any structures or infrastructure that impact on the safety of the KNPS, its associated infrastructure and people (on-site and neighbouring). The existing powerlines is a connection with the northern and southern power grid and cannot be burned as this will require de-energising of the powerline. - Eskom is committed to maintain transmission corridors in line with the Vegetation Management Plan Dassenberg-Koeberg 132kV Powerlines (McDonald, 2013), and if considered necessary, an option of reseeding can be considered to maintain the ecological integrity. - With reference to Figure 2-5 showing the “Vegetation types found on the Koeberg Nature Reserve Site”, it is evident that approximately 80% of the Nature Reserve is covered with the Cape Flats Dune Strandveld and “unlike fynbos and renosterveld, fire plays a lesser role in strandveld communities. Despite high cover of the strandveld shrublands, fire frequency is low, i.e. fire cycle of 20
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	<ul style="list-style-type: none"> - Chapter 5, pg. 13: Only use of biocontrol for invasive vegetation management? What about non-target species? - Chapter 5, pg. 14: Mention here that game management plan that will be drafted for the game management. - Chapter 5, pg. 19: Should sustainable harvesting be contemplated, all the relevant legislation must be adhered to and the relevant authorities consulted (e.g. CapeNature) - Species of conservation concern list does not include any plants. There are plant scc's based on EIAs and Bas assessed. - Chapter 5, pg. 27: 5.4.1 Does the visitors centre include information on the nature reserve and biodiversity? - Chapter 5, pg. 27: 5.4.4 Community involvement: alien tree woodcutters should be included in the invasive vegetation management 	<p>to 100 years" (Mucina & Rutherford, 2006). The Atlantis Sand Fynbos, a fire-driven system that as a general rule requires burning every 12 to 15 years (McDonald, 2013), is located to the south and south-western corner of the Nature Reserve and this area houses the section of the transmission corridor and Administrative Centre and Training Centre Complex.</p> <p><u>General:</u></p> <ul style="list-style-type: none"> - With reference to Section 5.2.3 – Game Management, reference to the Game Management Plan has been made. - Section 5.2.5 makes provision for the need of sustainable harvesting and that these activities will be "in line with all relevant legislation, i.e. permit issued by CapeNature". - Changes have been made to Section 5.2.7 – Baseline Data Collection to reflect that the KMA records and track any unique and credible siting of the animal Species of Conservation Concern (SCC) as listed in Table 5-10. All floral species has been or are recorded by specialist studies within the boundaries of the Nature Reserve. - When requested, the Koeberg Visitor's Centre makes provision for the public and target audiences to access information on the KNPS and the Nature Reserve by means of brochures, presentations and videos. - Section 5.4.4 – Community Involvement has been removed from this section and included in Section 2.4.10.
		<ul style="list-style-type: none"> - Overall the Koeberg Management Authority (KMA) will determine the frequency of these controlled burning programmes on guidance of the fire cycles recommended by McDonald (2013). - Transmission Corridors: No fires shall be permitted underneath the powerlines and shall be managed in line with the Vegetation Management Plan Dassenberg-Koeberg 132 kV Powerlines (McDonald, 2013), and if considered necessary, an option of

		<p>reseeding can be considered by the KMA</p> <ul style="list-style-type: none"> - As stated in Table 5-5 it is Eskom’s objective to establish a long-term programme for the eradication of invasive species, Table 5-4 stated that eradication by means of controlled burns will be considered as a last resort. <p><u>General:</u></p> <ul style="list-style-type: none"> - With reference to Section 5.2.3 – Game Management, reference to the Game Management Plan has been made. - Section 5.2.5 makes provision for the need of sustainable harvesting and that these activities will be “in line with all relevant legislation, i.e. permit issued by CapeNature”. - Changes have been made to Section 5.2.7 – Baseline Data Collection to reflect that the KMA records and track any unique and credible siting of the animal Species of Conservation Concern (SCC) as listed in Table 5-10. All floral species has been or are recorded by specialist studies within the boundaries of the Nature Reserve. - When requested, the Koeberg Visitor’s Centre makes provision for the public and target audiences to access information on the KNPS and the Nature Reserve by means of brochures, presentations and videos. - Section 5.4.4 – Community Involvement has been removed from this section and included in Section 2.4.10.
	<p>In summary, through this document ticks all the boxes ito what is required structurally in a management plan for a protected area, the essence of why this area should be conserved is often lost in the overly development driven agenda. If this bias can be addressed, it would make this document more balanced and provide clearer conservation guidelines for this important site.</p>	<p>Noted.</p>
<p>Andre Rossouw, CoCT, Environmental</p>	<p>I think the management plan is comprehensive and covers all aspects as required. Just a few minor suggestions from my side.</p> <ul style="list-style-type: none"> - In the introduction it would be nice to mention that Koeberg forms part 	<ul style="list-style-type: none"> - Reference with regards to the Dassenberg Coastal Catchment Partnership (DCCP) has been included as requested. - Although the CoCT ERM Department has indicated that the Cape

Resource Management Department August 2014	of the greater Dassenberg Coastal Catchment Partnership (DCCP). Please see the attached doc for background info on the DCCP FYI - Atlantis Sand Fynbos is Critically Endangered and Cape Flats Dune Strandveld is Endangered and both fall within the Fynbos Biome. Sand Fynbos is a fire driven system and should burn on a fire cycle of 8 -15 years. Strandveld has a much longer fire cycle 20 -100 years.	Flats Dune Strandveld has an “Endangered” status, the DEADP has indicated that the National List of Threatened Ecosystems (2011) should be used to reflect the status of the vegetation type. According to this list the Cape Flats Dune Strandveld is listed as “Critically Endangered”.
Morne Theron, Environmental Resource Management Department CoCT 12 August 2014	I concur that the City of Cape Town: ERMD management requirement/amendments to the draft Koeberg Nature Management Plan (KNMP) as was raised during the 19 June 2014 Management Plan workshop have sufficiently been addressed. In addition to the minor additional changes listed by our André Rossouw below, note the following to typo errors: 1. Definitions, cover page 7 of 11: “Borehole includes a well, excavation or my [any] artificially constructed or improved underground cavity which can be” 2. Chapter 1, Section 1.5 (Bullet-point 4) on page 7 of 8: “protect the ecological integrity and functioning of wetlands, [and] their catchments;” It is understood that, following a period of targeted public participation, the final draft will be submitted to Cape Nature for final approval. It will be appreciated if copies of the final KNMP and the competent authority’s approval letter is provided to the City for record purposes once available. [Remember the approval of the KNMP also relates to the compliance of Training Facility’s Site Development Plan approval condition].	Noted.
Mr Walt Molpus 6 February 2015	“I visit the reserve on a frequent basis and thoroughly enjoy every experience. ...the reserve is well kept and this document, I trust, will only serve to galvanize the already existing high level management the reserve is now experiencing.”	Noted.
	“Graphic Figure 5-2 Process for the implementation of the Management Plan “While this is a nice graphic I couldn’t find a defined structure to participate in the listed activities. For example: Who, by position, will be tasked with formally reviewing the plan on a 5 year basis? Who is tasked with attending the Annual Management Meeting, etc, etc. (Oops, found this in Chapter 4)”	Implementation of the Management Plan (MP): The MP is a strategic document and as such only contains high level information. The details of who does what is included in other internal Eskom documentation. One of the reasons we exclude this kind of detail from the MP is that we did not want the MP to contain too much detail about the implementation as this changes from time to time as these changes would then need approval from the

		<p>Minister of the Executive of the Department of Environmental Affairs and Development Planning.</p>
	<p>“In section 5.2.2. there is the following footer: “Due to budget constraints the clearing contract had to be cancelled. Eskom will do clearing with the Conservation Team, but a number cannot be prescribed at the moment. This is subject to change as funding becomes available” “Not sure why we’re paying someone to come in and clear rooikrans trees when we can get the guys who sell the wood for fire places and braais to do it for free. Just a thought.”</p>	<p>Clearing aliens: We did use woodcutters extensively in the past and they have helped us to date with the clearing of large portions of specifically Rooikrans and Port Jackson. We are now at the point where they woodcutters are not interested in the areas we still have left as it is not viable for them to remove the material at present due to the young age and size of the present trees. Furthermore, the increased security requirements at the Power Station requires that any woodcutters undergo the Koeberg Fitness-For-Duty training and qualification. This has proved to be a challenge for many of the woodcutters. Apart from the FFD challenges unfortunately the woodcutters also resulted in littering, hydrocarbon spills, and damage to roads and Fynbos, and we found snares. This has led us to review our use of woodcutters.</p>
	<p>“While I think the NSRI is a great organization and do support their activities, I cannot agree that they need an annual Nature Reserve Open Day. I like to follow the philosophy with natural lands of ‘Take Nothing, Leave Nothing’. Let them give boat rides if they want a fundraiser and keep the train of 4x4s out of the nature reserve.”</p>	<p><u>Koeberg Open day:</u> The Koeberg Nature Reserve Open Day was started in 2001 when Koeberg Nuclear Power Station celebrated the 10th anniversary of the establishment of the Koeberg Nature Reserve. As part of the celebration, Koeberg wanted to open the reserve to a limited number employees and members of the public to explore the reserve in their own 4x4 vehicles. The local NSRI Rescue Station, Station 18 in Melkbosstrand was asked to assist with the preparation and to both guide and exercise control over the 4x4 vehicles that were going to be allowed into the reserve, under strict management of the Conservation Management. It was decided that vehicles would be divided into ten (10) groups of no more than fifteen (15) vehicles per group. Each group would have a guide and a tail that would ensure that all vehicles remained in their designated group and that no vehicle strayed from the track that was laid out before the event. This format is still used today. The day is normally a huge success for the Koeberg Nature Reserve and it opened the door for members of the public to experience this unique reserve right on their door step.</p>

This is a unique event because it's the only time that members of the public are able to tour the reserve in their own 4x4 vehicles. The 4x4 tour follows predetermined roads, tracks and routes through the reserve. The guided tour exposes the visitor to the diverse flora and fauna that exists within this pristine coastal fynbos area.

The event was well received with visitors begging for the day to be repeated. It was with this in mind that Koeberg Power Station decided to repeat the event the following year as it has done ever since. However, the local NSRI Rescue Station was afforded the opportunity to use the event as a fund-raising opportunity.

Control over the 4x4 vehicles remains strict with each driver having to attend a driver briefing before departure. During the briefing issues of safety are discussed, as well as the appreciation of the environment which includes the requirements to stay only on the tracks as laid out for the tour. To assist with this, the Land Cruiser Club of South Africa (Western Cape Branch) assist by providing the lead and tail vehicle for each and every group. The club members also man each point of interest to ensure that drivers of the 4x4 vehicles adhere to the rules as defined and discussed before the tour started.

The local NSRI Rescue Station has come to rely on this fund-raising event and look forward to organising and managing it each year. Koeberg sees this as part of its Social Development Program and want to continue this event into the foreseeable future. In partnership between Eskom and the local NSRI, numerous assistance has been given to the Conservation Section by the NSRI when there is a need to save a beached whale, whale sharks, Dolphins, Penguins and even lately the seal pups that washed ashore was taken back to Robbesteen (Seal Island, about 120 of them)

Any change to these current policies will have an adverse effect on both the public who can't wait to tour this reserve in their 4x4 vehicles and the local NSRI Rescue Station who rely on the funds that this initiative provides them. The local NSRI is of great assistance to Eskom in this event and we would not like to take on such an event without their assistance.

I hope this paints a better picture. It is an Eskom Koeberg event with the assistance of the Local NSRI. (One of three events) Existing tracks are being used and no harm is being done to the environment.

<p>Mr. YM Atwaru DWS 19 March 2015</p>	<p>“An important part of this department’s mandate is the protection of water resources in terms of Chapter 3 of the National Water Act, which include inter alia, the classification of all significant water resources, and settling of the Reserve as well as Resource Quality Objectives. Therefore, the development and implementation of a Management Plan for the Koeberg Nature Reserve will certainly serve as a complementary tool to achieve and sustain ecological targets of water resources in these areas, and will therefore be supported by the department.”</p> <p>No Comments for Chapters 0, 1 and 4.</p> <p>“The comments that follow are provided inter alia within the context of Chapter 3 (Protection of Water Resources) of the National Water Act (Act No. 36 of 1998) (“NWA”).”</p>	<p>Noted.</p>
	<p>Chapter 2: “It is important to highlight that clearing of alien vegetation should be maintained in the KNR to ensure that the subject wetlands continue to function in an ecologically sustainable manner, particularly considering the fact that the seasonal wetlands have been classified as having a high conservation importance, coupled with the fact that less than 3% of these wetland types remain intact in the Cape Metro Area.</p> <p>“Please take note that this Department has conducted a national study to update the present ecological state, importance and sensitivity of water resources (PES EIS study) which was concluded in 2013. The ecological categorisation of the wetland in the KNR should therefore be in alignment with the PS EIA study.</p> <p>“It is also noted that a comprehensive groundwater monitoring programme commenced in 2008 but was terminated in 2010. It is recommended that this monitoring programme be re-initiated, even if it continues at a lower frequency (i.e. twice per year) in order to monitor trends and determine the state of groundwater in the KNR. This measure will also serve as useful input into the adaptive management methodology advocated for the KNR.”</p>	<p>Eskom is committed to the clearing of alien vegetation as done in the past and as addressed in Chapter 5 – Operational Management.</p> <p>As stated in Chapter 2 monitoring boreholes are situated around the two reactors at the KNPS, solely used for groundwater monitoring done by Koeberg Engineering. This monitoring and reporting are conducted in line with the existing Eskom Water Permit. Eskom is also committed to report any incidents that pollute or may pollute a water resource as required under section 23(3) of the National Water Act (1998).</p> <p>Groundwater monitoring, i.e. water levels for groundwater abstraction and quality for the discharge of effluent in the dams, is also conducted by the City of Cape Town and Council for Scientific and Industrial Research (CSIR) as stipulated in the conditions of the applicable water use licences. The CoCT is in the process of finalising an Environmental Management Programme (EMPr) for water abstraction and effluent disposal in the Koeberg Nature Reserve by the CoCT Bulk Water and Wastewater.</p> <p>There are currently 31 extraction boreholes on site which are monitored and maintained on an ongoing basis. These boreholes are controlled from the Atlantis Water Depot. Maintenance and water quality monitoring is done on site.</p>
	<p>Chapter 3: “It would be appreciated if the 5th aspect in Table 3-1 on page 2 of this chapter be reworded as follow: ‘Focus on ensuring that acceptable rehabilitation</p>	<p>Noted. The requested change was made to Table 3-1.</p> <p>With reference to Chapter 5, continual monitoring is undertaken by the KMA</p>

	<p>standards are employed when land or water resources are disturbed or impacted". This will ensure that rehabilitation initiatives are also inclusive of water resources in the KNR.</p> <p>"Under the section on baseline data collection on page 3, it is recommended that "continual monitoring" be added.</p> <p>"It is also recommended that monitoring be included as a specific activity under Ecosystem Management on page 6. This will include groundwater monitoring as well as bio-monitoring".</p>	<p>in order to maintain and manage the various aspects and operational requirements as part of the Management Plan.</p>
	<p>Chapter 5: "It is imperative to include the NWA under the section entitled "Legal Framework". As stated above, Chapter 3 specifically deals with water resource protection, including pollution prevention as well as remedying the effects of pollution of water resources.</p> <p>"It is recommended that monitoring of wetland health be included in this section, as well as a section on groundwater monitoring to determine the state of and trends in groundwater quantity and quality in KNR."</p>	<p>Noted.</p>
	<p>Chapter 6: "It is recommended that groundwater monitoring be included in the section entitled "Ecosystem Management" on page 3 of this chapter.</p>	<p>Noted.</p>
	<p>General Comments:</p> <p>"Your document is silent on reporting protocols and it is therefore recommended that the monitoring results are reported to the relevant body/forum as per the proposal that could have been made in the Environmental Impact Assessment Report, which would comprise of various relevant stakeholders where operational activities and programmes inclusive of monitoring are reported on.</p> <p>"It is advised that any further communication on this matter be referred to the Provincial Head: Western Cape of Department of Water and Sanitation."</p>	<p>As stated above all monitoring and reporting are conducted in terms of the water permits/water use licences issued by the Department of Water and Sanitation to Eskom and the CoCT, respectively.</p>
<p>Ms. Melanese Schippers DEADP: Development Management Region 1</p>	<p>1.1 Classification of Ecosystem Status of vegetation occurring at the Nature Reserve:</p> <p>"It is not clear whether the ecosystem status of the vegetation types occurring in the Nature Reserve have been classified in terms of the National Environmental Management: Biodiversity Act (Act no. 10 of 2004) (NEMBA) National List of Threatened Ecosystems, December 2011. Please note that when classifying ecosystem status of vegetation, the NEMBA National List of Threatened</p>	<p>Noted. The changes in Chapter 2 have been made accordingly.</p>

17 March 2015	Ecosystems, December 2011 must be used.”	
	<p>1.2. Zoning Plan:</p> <p>1.2.1. “In accordance with the Norms and Standards for the management of a protected area in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) a zoning plan indicating what activities may take place in different sections of the area must be included in the management plan. It further states that an infrastructure development plan, subject to the zoning plan must also be included in the management plan and must indicate where development is to be considered.”</p>	<p>In terms of Item 1.2.1. – The infrastructure development plan, Chapter 4, Section 4.3 shows all ‘Proposed Developments’. The table lists the planned developments and the zonation of the land affected. All of these developments are subject to EIAs and as such the EIA would determine the location of the development and would determine the impact on sensitive ecosystems. To avoid the duplication of developmental information that is subject to an EA process, the EIA process would determine in detail the impact on sensitive ecosystems and the impact on the nature reserve management plan. Please provide more clarity whether Section 4.3 is adequate and/or if any changes should be made.</p> <p>Eskom also refer to DEADP comments in Item 1.2.3 regards the development and its relation to sensitive ecosystems. Should Eskom add a column in Table 4-8 in Section 4.3 listing the sensitive ecosystem affected?</p> <p>DEADP Response:</p> <p>I refer to the below. What we are trying to say is, should environmental authorisation be granted for your proposed projects you need to indicate its location on a map which must be included in your management plan when it gets updated. The location (you have an idea now of where you are proposing the developments) of the proposed developments may be included in figure 4-2 and 4-3. Hope this answer your questions.</p> <p>Eskom Response:</p> <p>An additional column is added to Table 4-8 showing the type of vegetation will be affected by proposed developments in the CZ. All proposed developments in the DZ will be located in disturbed areas.</p>
	1.2.2. It is noted that a zonation plan has been included in the management plan that makes provision for a conservation zone and development zone.	Noted.
	1.2.3. Further, should development be proposed within the proclaimed Nature Reserve, please note that a development plan indicating where development is to be considered in relation to the zoning plan and sensitive ecosystems must be included in the management plan.	Noted.

