NOTICE 130 OF 2019

LIMPOPO
PROVINCIAL GOVERNMENT
ECONOMIC DEVELOPMENT, ENVIRONMENT AND TOURISM
REPUBLIC OF SOUTH AFRICA

INTENTION TO PUBLISH BIOREGIONAL PLANS UNDER SECTION 47(2) AND SECTION 100(1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT 10 OF 2004

CALL FOR PUBLIC COMMENTS

I, Thabo Mokone, MEC for Economic Development, Environment and Tourism, hereby notify the public of my intention to publish bioregional plans in respect of the areas of jurisdiction of the Capricorn District municipality and the Sekhukhune District municipality and hereby call for public comments w.r.t. the plans.

The relevant draft bioregional plans as well as copies of the official notices as published in the Provincial Gazette may be obtained from the locations set out in the Schedule.

All written representations must be submitted within 30 (thirty) days of the date of publication of this notice by means of any of the following methods and for the attention of Mr. Errol Moeng:

**Hand Delivery:** Corner of Dorp and Suid streets, Polokwane

**Email:** MoengET@ledet.gov.za

**SCHEDULE**
**SANBI Website Address:**
- Capricorn - [http://bgis.sanbi.org/Projects/Detail/212](http://bgis.sanbi.org/Projects/Detail/212)
- Sekhukhune - [http://bgis.sanbi.org/Projects/Detail/211](http://bgis.sanbi.org/Projects/Detail/211)

**Head Office:** Limpopo Department of Economic Development, Environment and Tourism

**Address:** Biodiversity Management Directorate, 20 Hans van Rensburg Street, Polokwane, 0700.
Executive Summary: Capricorn Bioregional Plan

Purpose and objectives:
The declaring of bioregions and the gazetting of bioregional plans forms part of the legislated tools identified by the National Environmental Management: Biodiversity Act (Act No. 10 of 2004), hereafter referred to as the Biodiversity Act, to aid in the conservation and management of South Africa’s biodiversity. The purpose of a bioregional plan is to facilitate the safeguarding of biodiversity within identified biodiversity priority areas that fall outside of the Protected Area (PA) Network, as well as, to provide a map of biodiversity priorities with accompanying land use planning and decision-making guidelines to inform land-use planning, environmental assessment and authorisations, and natural resource management.

Intended users and uses:
The bioregional plan has both mandatory and recommended users. Mandatory users are obligated to take the bioregional plan into consideration, while recommended users could find the bioregional plan to be a useful planning and development tool.

Underlying biodiversity plan:
The Capricorn District Bioregional Plan is based on the Critical Biodiversity Area (CBA) maps developed in the Limpopo Conservation Plan V2, 2013 the current systematic biodiversity plan for the province undertaken by the Limpopo Department of Economic Development, Environment and Tourism (LEDET).

Physical context:
Capricorn District municipality is situated in the centre of the Limpopo Province. It shares its borders with four district municipalities namely; Mopani (east), Sekhukhune (south), Vhembe (north) and Waterberg (west). There are four (4) Local Municipalities (LMs), namely:
- Blouberg LM (9 540 km²)
- Molemole LM (3 628 km²)
- Polokwane LM (5 054 km²)
- Lepelle-Nkumpi LM (3 484 km²)

Significance of biodiversity:
Capricorn District has 26 different vegetation types. Six of the 26 vegetation types are classified as Threatened ecosystems, namely Sekhukhune Plains Bushveld, Polokwane Plateau Bushveld and Spingbokvlakte Thornveld which is classified as Vulnerable in the national list of threatened ecosystems published in terms of the Biodiversity Act (DEA, 2011). Tzaneen Sour Lowveld and Sekhukhune Norite Bushveld are classified as Endangered, while it should also be noted that Woodbush Granite Grassland, located on the eastern border of the District in the southeast eastern portion of the District, is classified as Critically Endangered. Fifteen (15) of the vegetation types occurring within the District are classified as endemic and two (2) as near-endemic.

Planning environment:
Many instruments and informants were addressed in terms of understanding the status quo of the planning environment relating to biodiversity conservation and planning within the District inclusive of Protected Areas planning (Protected Areas, National Protected Areas Expansion Strategy), Multi sectoral planning (Spatial Development Frameworks, Integrated Development Plans) and Other Informants (Important Bird Areas).

Critical Biodiversity Areas:
One of the outputs of the LCPv2 is a map of Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs). These are classified into these different categories based on biodiversity characteristics, spatial configuration and requirement for meeting targets for both biodiversity pattern and ecological processes.
- Protected Areas are declared and formally protected under the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003), hereafter referred to as the Protected Areas Act. These include National Parks, Nature Reserves, World Heritage Sites and Protected Environments that are secured by appropriate legal mechanisms.
• **Critical Biodiversity Areas** are sites that are required to meet biodiversity targets for ecosystems and species, and need to be maintained in good ecological condition. The majority of the CBAs in the Capricorn District are CBA 1, which can be considered *irreplaceable* in that there is little choice in terms of areas available to meet targets. Those areas falling within CBA 2 are considered *optimal*. Although they represent areas where there are other spatial options for achieving targets, the selected sites are the ones that best achieve targets of the systematic biodiversity plan.

• **Ecological Support Areas** (ESAs) are areas that are important for supporting the ecological functioning of CBAs and protected areas and for meeting biodiversity targets for ecological processes. This category has also been split into ESA1 and ESA2 on the basis of land cover. ESA1s are in a largely natural state, while ESA2s are no longer intact but potentially retain significant importance from an ecological process perspective (e.g. agricultural land maintaining landscape connectivity).

• **Other Natural Areas** (ONAs) are areas that still contain natural habitat but that are not required to meet biodiversity targets.

• **No Natural Areas Remaining** are areas without intact habitat remaining.

**Capricorn District Bioregional Plan:**
The bioregional plan for the Capricorn District Municipality is based on the Limpopo Conservation Plan v2 (Desmet *et al.*, 2013) and adapted to take into account stakeholder comments, threats and agreed resolutions. The format and content of this document is based on the Vhembe District Bioregional Plan.

In response to potential losses and threats identified during the alignment process undertaken during the development of the Capricorn District Bioregional Plan, the CBAs and ESAs of the LCPv2 required updating in order to ensure that biodiversity targets remained intact within the District.

**Guidelines for decision-making:**
These guidelines provide a framework for land-uses compatible with the land management objectives of each category on the Map of CBAs. The guidelines are designed to aid planners to identify the appropriate zones and controls to impose on areas designated as Critical Biodiversity Areas or Ecological Support Areas. Importantly, the Capricorn District Bioregional Plan provides guidance on appropriate land uses and does not grant or remove existing land-use rights or take the place of development application authorisation processes.

The guidelines should be used in conjunction with other sector-specific guidelines applicable within the Province, such as *Mining and Biodiversity Guideline* (SANBI, 2013), *Atlas of Freshwater Ecosystem Priority Areas for South Africa* (Nel *et al.*, 2011), *Limpopo Protected Area Expansion Strategy Technical Report* (Desmet *et al.*, 2014), *Implementation Manual for Freshwater Ecosystem Priority Areas* (Driver *et al.*, 2011).

**Additional measures:**
In addition to the guidelines for decision-making, the bioregional plan recommends additional measures to support biodiversity management, conservation and planning within the Capricorn District Municipality. These include the Data collation and management, Capacity building, Effective biodiversity management, Building a biodiversity economy and Awareness raising.

**Monitoring and review:**
The primary purpose of on-going monitoring is to evaluate the on-going implementation of the bioregional plan. In this respect, implementation indicators are proposed which do not require investment into baseline biodiversity data gathering, but rather focus on the evaluation of the implementation mechanism. This should allow indicators to be evaluated on at least an annual basis.

However, it will be necessary to evaluate the biodiversity outcome of the implementation of the bioregional plan in order to conduct the required five-year review of the bioregional plan. Additional biodiversity indicators have been proposed in this regard.

The bioregional plan must be reviewed and updated (where necessary) at least every five years. Should the review process indicate that it is necessary to update the bioregional plan or components of the bioregional plan, then this should be undertaken and the revised bioregional plan should be re-submitted to the Member of the Executive Committee (MEC) for approval. Ideally, this should be timed to precede the revision cycle for municipal SDFs. Although the SDM is the lead implementing agency for the Sekhukhune District Bioregional Plan, LEDET is the agency responsible for the update of the Sekhukhune District Bioregional Plan as required.
Executive Summary: Sekhukhune Bioregional Plan

Purpose and objectives:
The declaring of bioregions and the gazetting of bioregional plans forms part of the legislated tools identified by the National Environmental Management: Biodiversity Act (Act No. 10 of 2004), hereafter referred to as the Biodiversity Act, to aid in the conservation and management of South Africa’s biodiversity. The purpose of a bioregional plan is to facilitate the safeguarding of biodiversity within identified biodiversity priority areas that fall outside of the Protected Area (PA) Network, as well as, to provide a map of biodiversity priorities with accompanying land use planning and decision-making guidelines to inform land-use planning, environmental assessment and authorisations, and natural resource management.

Intended users and uses:
The bioregional plan has both mandatory and recommended users. Mandatory users are obligated to take the bioregional plan into consideration, while recommended users could find the bioregional plan to be a useful planning and development tool.

Underlying biodiversity plan:
The Sekhukhune District Bioregional Plan is based on the Critical Biodiversity Area (CBA) maps developed in the Limpopo Conservation Plan V2, 2013 the current systematic biodiversity plan for the province undertaken by the Limpopo Department of Economic Development, Environment and Tourism (LEDET).

Physical context:
Sekhukhune District municipality is located in the south east of Limpopo Province. It is bordered by Gauteng province to the south, Mpumalanga province to the east as well as Waterberg towards the West. There are four (4) Local Municipalities (LMs), namely:
• Elias Motsoaledi LM (3713 km2)
• Makhuduthamaga LM (2110 km2)
• Ephraim Mogale LM (2011 km2)
• Fetakgomo Tubatse LM (newly formed) (5693 km2)

Significance of biodiversity:
Sekhukhune District Municipality has 23 different vegetation types. Eight of the 23 vegetation types are classified as Threatened ecosystems, whereby four (4) are classified as Endangered (Malmani Karstlands, Sekhukhune Mountainlands, Sekhukhune Norite Bushveld and Tzaneen Sour Lowveld) and four (4) are classified as Vulnerable (Northern Escarpment Dolomite Grassland, Rand Highveld Grassland, Sekhukhune Plains Bushveld and Springbokvlakte Thornveld). Four (4) of the vegetation types occurring within the District are classified as endemic and two (2) as near-endemic.

Planning environment:
Many instruments and informants were addressed in terms of understanding the status quo of the planning environment relating to biodiversity conservation and planning within the District inclusive of Protected Areas planning (Protected Areas, National Protected Areas Expansion Strategy), Multi sectoral planning (Spatial Development Frameworks, Integrated Development Plans) and Other Informants (Important Bird Areas).

Critical Biodiversity Areas:
One of the outputs of the LCPv2 is a map of Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs). These are classified into these different categories based on biodiversity characteristics, spatial configuration and requirement for meeting targets for both biodiversity pattern and ecological processes.
• Protected Areas are declared and formally protected under the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003), hereafter referred to as the Protected Areas Act. These include National Parks, Nature Reserves, World Heritage Sites and Protected Environments that are secured by appropriate legal mechanisms.
• Critical Biodiversity Areas are sites that are required to meet biodiversity targets for ecosystems and species, and need to be maintained in good ecological condition. The majority of the CBAs in the Sekhukhune District are
CBA 1, which can be considered irreplaceable in that there is little choice in terms of areas available to meet targets. Those areas falling within CBA 2 are considered optimal. Although they represent areas where there are other spatial options for achieving targets, the selected sites are the ones that best achieve targets of the systematic biodiversity plan.

• Ecological Support Areas (ESAs) are areas that are important for supporting the ecological functioning of CBAs and protected areas and for meeting biodiversity targets for ecological processes. This category has also been split into ESA1 and ESA2 on the basis of land cover. ESA1s are in a largely natural state, while ESA2s are no longer intact but potentially retain significant importance from an ecological process perspective (e.g. agricultural land maintaining landscape connectivity).

• Other Natural Areas (ONAs) are areas that still contain natural habitat but that are not required to meet biodiversity targets.

• No Natural Areas Remaining are areas without intact habitat remaining.

Sekhukhune District Bioregional Plan:
The bioregional plan for the Sekhukhune District Municipality is based on the Limpopo Conservation Plan v2 (Desmet et al., 2013) and adapted to take into account stakeholder comments, threats and agreed resolutions. The format and content of this document is based on the Vhembe District Bioregional Plan.

In response to potential losses and threats identified during the alignment process undertaken during the development of the Sekhukhune District Bioregional Plan, the CBAs and ESAs of the LCPv2 required updating in order to ensure that biodiversity targets remained intact within the District.

Guidelines for decision-making:
These guidelines provide a framework for land-uses compatible with the land management objectives of each category on the Map of CBAs. The guidelines are designed to aid planners to identify the appropriate zones and controls to impose on areas designated as Critical Biodiversity Areas or Ecological Support Areas. Importantly, the Sekhukhune District Bioregional Plan provides guidance on appropriate land uses and does not grant or remove existing land-use rights or take the place of development application authorisation processes. The guidelines should be used in conjunction with other sector-specific guidelines applicable within the Province, such as Mining and Biodiversity Guideline (SANBI, 2013), Atlas of Freshwater Ecosystem Priority Areas for South Africa (Nel et al., 2011), Limpopo Protected Area Expansion Strategy Technical Report (Desmet et al, 2014), Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al., 2011).

Additional measures:
In addition to the guidelines for decision-making, the bioregional plan recommends additional measures to support biodiversity management, conservation and planning within the Sekhukhune District Municipality. These include the Data collation and management, Capacity building, Effective biodiversity management, Building a biodiversity economy and Awareness raising.

Monitoring and review:
The primary purpose of on-going monitoring is to evaluate the on-going implementation of the bioregional plan. In this respect, implementation indicators are proposed which do not require investment into baseline biodiversity data gathering, but rather focus on the evaluation of the implementation mechanism. This should allow indicators to be evaluated on at least an annual basis. However, it will be necessary to evaluate the biodiversity outcome of the implementation of the bioregional plan in order to conduct the required five-year review of the bioregional plan. Additional biodiversity indicators have been proposed in this regard.

The bioregional plan must be reviewed and updated (where necessary) at least every five years. Should the review process indicate that it is necessary to update the bioregional plan or components of the bioregional plan, then this should be undertaken and the revised bioregional plan should be re-submitted to the Member of the Executive Committee (MEC) for approval. Ideally, this should be timed to precede the revision cycle for municipal SDFs. Although the SDM is the lead implementing agency for the Sekhukhune District Bioregional Plan, LEDET is the agency responsible for the update of the Sekhukhune District Bioregional Plan as required.
Land management objectives and land-use guidelines: Capricorn and Sekhukhune Bioregional Plans

**CRITICAL BIODIVERSITY AREAS: CBA1 and CBA2**

CBA1: Irreplaceable Sites – areas that are essential for meeting biodiversity targets and where no alternative sites are available to meet the targets.

CBA2: Optimal Sites-Areas selected to meet biodiversity targets where alternative sites may be available to meet targets but these are the optimal sites based on complementarity, connectivity and avoidance of conflict with other land uses.

**LAND MANAGEMENT OBJECTIVE:**

- Maintain in a natural state with limited or no biodiversity loss.
- Rehabilitate degraded areas to a natural or near natural state, and manage for no further degradation.

**LAND MANAGEMENT RECOMMENDATION:**

- Obtain formal conservation protection where possible.
- Implement appropriate zoning to avoid loss of intact habitat or intensification of land use.

**STATUTORY REQUIREMENTS:**

As per Government Notice No. R985, any development that occurs in the Limpopo Province within a CBA will be subject to, at a minimum, a Basic Assessment Process. Environmental screening, EIAs and their associated specialist studies must be conducted.

**COMPATIBLE LAND USE:**

- Conservation and associated activities.
- Extensive game farming and ecotourism operations with strict control on environmental impacts and carrying capacity.
- Extensive livestock production with strict control on environmental impacts and carrying capacity.
- Required support infrastructure for the above.
- Municipal Open Space.
- Urban land uses (residential, golf estates, rural residential, resorts, business, mining and industrial infrastructure such as roads, power lines and pipelines) are not permitted.
- Intensive animal production (all types including dairy farming, feedlots, imported foodstuffs and improved / irrigated pastures) is not permitted.
- Arable agriculture (forestry, dryland and irrigated cropping) is not permitted.
- Smallholdings are not permitted.

**GUIDELINES:**

**General:**

- No Further loss of natural habitat should occur i.e. land in this category should be maintained as natural vegetation cover.
- These areas of land can act as possible biodiversity offset receiving areas.
- Prioritise CBAs for land care projects, Working for Water (WfW) and NGOs to direct their conservation projects, programmes and activities.
- Prioritise CBAs for invasive alien plant removal.
- Fire management regimes should be appropriate for the ecosystem type concerned.
- Control of illegal activities (such as hunting and dumping), which impact biodiversity should be prioritized in CBA areas.
- Capacitate local, district and provincial authorities to enforce the bioregional plan
- Enforce EIA requirements in all CBA areas. Institute penalties if required
- Enforce WULA requirements in all CBA areas. Institute penalties if required
- Enforce planning controls to stop the spread of incompatible land use
- Monitor threat areas for further spread of incompatible land use.
- Monitor trends in other areas.
- Revise Mining Rights areas to exclude CBA areas of the bioregional plan
• Enforce EIA requirements for mine expansion and new mines in all CBA areas regardless of mining right status.
• Enforce planning controls to stop the expansion and development of mines in CBA areas
• Enforce planning controls to stop the development of incompatible land uses in CBA areas

Protection:
• CBAs not formally protected should be rezoned where possible to conservation or appropriate open space zoning, and where possible declared in terms of the Protected Areas Act.
• The Biodiversity Stewardship program should prioritise privately owned erven in CBAs to be incorporated into the protected area network through Biodiversity Stewardship Agreements and incentives.

Rehabilitation:
• Degraded or disturbed CBAs should be prioritized for rehabilitation through programmes such as Working for Water, Working for Wetlands.

Development:
Where infrastructure is proposed:
• Rezoning of properties to afford additional land-use rights that will result in increased biodiversity loss should not be granted.
• Permission to increase the permitted number of units per erf or per Ha should not be granted.
• Developments should be limited to existing developed / degraded footprints, if present.
• Units carefully dispersed or clumped to achieve least impact, particularly with regard to habitat loss and fragmentation.
• The installation of infrastructure in CBAs is not desirable and should only be considered if all alternative alignment and design options have been assessed and found to be non-viable. Under such conditions, at least a Basic Assessment (BA) should be undertaken, and if approved, a comprehensive EMP must be developed and best-practice restoration efforts strictly implemented.
• Ecological specialist to conduct the ecological assessment.

Where development proposals other than the preferred biodiversity-compatible land-uses (see table above) are submitted in terms of the NEMA: EIA Regulations or land development application process:
• A Screening Exercise should be undertaken by a Biodiversity Specialist or Ecologist to verify the CBA map category on site.
• If the site is verified as a CBA, developments other than the preferred biodiversity-compatible land-uses should be investigated in detail and the mitigation hierarchy applied in full.
• If the application is pursued they should be informed by a specialist biodiversity assessment.
• EIA’s and their associated specialist studies should focus on confirming the presence and significance of these biodiversity features, identifying features (e.g. threatened species) not included in the existing datasets, and on providing site-specific information to guide the application of the mitigation hierarchy.

If mining authorisation is granted:
• The authorisations should set limits on allowed activities and impacts, and may specify biodiversity offsets that would be written into licence agreements and/or authorisations. This must be monitored to ensure that these limits and biodiversity offsets are implemented.

Aquatic ecosystems:
• Maintain water quality and flow regimes should be maintained as close to natural as possible.
• Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to.
• All effluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release.
• Storm water flow should be managed to avoid damage to CBA areas.
• Where CBAs include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, a 32m buffer around rivers) or buffers around wetlands, particular attention should applied to ensure that these remain in a natural state or are rehabilitated to this state. In addition to avoiding irreversible land use modification, other activities such as livestock access may need to be controlled and alien vegetation managed to avoid damage
to banks. Do not permit infilling, excavation, drainage, hardened surfaces (including buildings and asphalt), intensive agriculture or any new developments within a river or wetland.

- Areas that are degraded or disturbed should be rehabilitated, through programmes such as Working for Water, Working for Wetlands and a systematic alien vegetation eradication programme implemented. Rehabilitation work should be undertaken in a way that does not negatively impact on the survival of threatened species.

**ECOLOGICAL SUPPORT AREAS (ESA1)**

Natural, near natural or degraded areas that support the ecological functioning of CBAs and Protected Areas and maintain ecological processes.

**LAND MANAGEMENT OBJECTIVE:**

- Maintain ecosystem functionality and connectivity allowing for limited loss of biodiversity pattern.

**LAND MANAGEMENT RECOMMENDATION:**

- Implement appropriate zoning and land management guidelines to avoid impacting ecological processes.
- Avoid intensification of land use.
- Avoid fragmentation of natural landscape.

**STATUTORY REQUIREMENTS:**

As per Government Notice No. R983, R984 and R985, all proposed developments:

- Of a certain category or type;
- That exceeds a certain area or extent;
- That is likely to result in pollution or emissions;
- That occurs in close proximity to water resources;
- Within sensitive areas as identified in an environmental management framework; Will be subject to, at a minimum, a Basic Assessment Process.

**COMPATIBLE LAND USE:**

- Conservation and associated activities.
- Extensive game farming and ecotourism operations.
- Extensive livestock production.
- Municipal open space systems
- Low density rural residential, small holdings or resorts where development design and overall development densities allow maintenance of ecological functioning.
- Urban land uses (residential, golf estates, business, mining and industrial infrastructure such as roads, power lines and pipelines) are not permitted.
- Intensive animal production (all types including dairy farming, feedlots, imported foodstuffs and improved / irrigated pastures) is not permitted.
- Arable agriculture (forestry, dryland and irrigated cropping) is not permitted.

Note: certain activities may be permitted subject to detailed impact assessments to ensure that developments were designed to maintain overall ecological functioning of ESAs.

**GUIDELINES:**

**General:**

- Maintain in a functional state, avoid intensification of land uses, and rehabilitate to a natural or semi natural state where possible. In irreversibly modified areas, which are important for maintaining ecological processes, current land uses should be maintained, intensification of use (e.g. a transition from agriculture to urban) should be avoided, and where possible areas should be rehabilitated.
- No further loss of natural habitat should be allowed, and land in this category currently in a degraded state should be rehabilitated or restored to a natural or semi-natural state once the current land use has ceased.
- Maintain current land uses where these play a role in supporting ecological processes.
- Ensure land use changes do not impact negatively on ecological processes.
• The maintenance of connectivity between CBAs, continued ecosystem functioning within the CBA corridors, and the prevention of degradation of adjacent CBAs must be achieved.
• After the CBAs, ESA1’s should be prioritised for land care projects, Working for Water (WfW) and NGO’s to direct their conservation projects, programmes and activities.
• Capacitate local, district and provincial authorities to enforce the bioregional plan
• Enforce EIA requirements in all ESA1 areas. Institute penalties if required
• Enforce WULA requirements in all ESA1 areas. Institute penalties if required
• Enforce planning controls to stop the spread of incompatible land use
• Monitor threat areas for further spread of incompatible land use.
• Monitor trends in other areas.
• Enforce planning controls to stop the development of incompatible land uses in ESA1 areas

**Development:**
Where infrastructure is proposed:
• Rezoning of properties to afford additional land use rights that will result in increased impact on ecological processes should not be granted, unless significant net conservation gains can be achieved, ecosystem functioning and connectivity of Ecosystem Support Areas (ESAs) will not compromised, and biodiversity impacts with regard to species and habitats are of at an acceptable significance and mitigated where possible.
• Developments should be limited to existing developed / degraded footprints, where possible.
• Units carefully dispersed or clumped to achieve least impact, particularly with regard to impacts on ecological processes.
• Ecological specialist to conduct the ecological assessment.

Where development proposals other than the preferred biodiversity-compatible land-uses are submitted in terms of the NEMA: EIA Regulations or land development application process:
• A Screening Exercise should be undertaken by a Biodiversity Specialist or Ecologist to verify the CBA map category on site.
• If the site is verified as an ESA, developments other than the preferred biodiversity-compatible land-uses should be carefully screened to ensure that developments are planned and activities undertaken in a way that minimizes impact on ecological processes. Impacts should be mitigated.
• If the application is pursued they should be informed by a specialist biodiversity assessment.
• EIA’s and their associated specialist studies should focus on confirming the presence and significance of these biodiversity features, identifying features (e.g. threatened species) not included in the existing datasets, and on providing site-specific information to guide the application of the mitigation hierarchy.

If mining authorisation is granted:
• The authorisations may set limits and specify biodiversity offsets that would be written into licence agreements and/or authorisations. This must be monitored to ensure that these limits and biodiversity offsets are implemented.

**Aquatic ecosystems:**
• Maintain water quality and flow regimes should be maintained as close to natural as possible.
• Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to.
• All effluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release.
• Storm water flow should be managed to avoid damage to ESA areas.
• Where ESAs include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, the 32m around rivers) or buffers around wetland particular attention should applied to ensure that these remain in a natural state or are rehabilitated to this state.
• Areas that are degraded or disturbed should be rehabilitated, through programmes such as Working for Water, Working for Wetlands and a systematic alien vegetation eradication programme implemented.
• Creation of berms, roads, culverts, canalisation, channelization, alien vegetation, impoundment, abstraction, well points, storm water or other point source inflows, irrigation return flows, grazing / trampling, agriculture, golf courses, suburban gardens, artificial deepening, and drainage, should be avoided where possible within the 1:20 year flood line.
ECOLOGICAL SUPPORT AREAS (ESA2)

Areas with no natural habitat that are nevertheless important for supporting ecological processes.

LAND MANAGEMENT OBJECTIVE:
• Avoid additional / new impacts on ecological processes.
• Ensure that land use is not intensified and that activities are managed to minimise impact on threatened species.

LAND MANAGEMENT RECOMMENDATION:
• Avoid intensification of land use, which may result in additional impact on ecological processes.
• Avoid conversion of agricultural land to more intensive land uses, which may have a negative impact on threatened species or ecological processes.

STATUTORY REQUIREMENTS:
As per Government Notice No. R983, R984 and R985, all proposed developments:
• Of a certain category or type;
• That exceeds a certain area or extent;
• That is likely to result in pollution or emissions;
• That occurs in close proximity to water resources;
• Within sensitive areas as identified in an environmental management framework; Will be subject to, at a minimum, a Basic Assessment Process.

COMPATIBLE LAND USE:
• Existing activities should be maintained but where possible, a transition to less intensive land uses or ecological restoration should be favoured.
• Any land use or activity that results in additional impacts on ecological functioning, mostly associated with the intensification of land use in these areas, is not permitted.

GUIDELINES:
General:
• Additional impacts on ecological processes should be avoided. In severely modified areas that are important for maintaining ecological processes, current land uses should be maintained, intensification of use (e.g. a transition from agriculture to urban) should be avoided, and where possible areas should be rehabilitated.
• The maintenance of connectivity between CBAs, continued ecosystem functioning within the CBA corridors, and the prevention of degradation of adjacent CBAs must be achieved.
• In some cases the rehabilitation of ESA2’s may be the suitable for land care projects, Working for Water (WiW) and NGOs to direct their conservation project, programmes and activities.

Development:
Where infrastructure is proposed:
• Infrastructure should be designed to avoid additional impacts on ecological processes.

In irreversibly modified areas which are still important for supporting ecological processes:
• Current land uses should be maintained, intensification of use (e.g. a transition from agriculture to urban) should be avoided, and where possible areas should be rehabilitated.
• Developments should be screened to ensure that they do not have an unacceptable impact on ecological processes.

If mining authorisation is granted:
• The authorisations may set limits and specify biodiversity offsets that would be written into licence agreements and/or authorisations. This must be monitored to ensure that these limits and biodiversity offsets are implemented.

Aquatic ecosystems:
• Maintain water quality and flow regimes should be maintained as close to natural as possible.
Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to.

All effluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release.

Storm water flow should be managed to avoid damage to ESA areas.

Where ESA2's include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, the 32m around rivers) or buffers around wetlands, particular attention should applied to ensure that there is no additional impact on ecological functioning, and where possible these areas rehabilitated to improve ecological functioning. In addition to avoiding intensification of land use, other activities such as livestock access may need to be controlled and alien vegetation managed to avoid damage to banks. Do not permit infilling, excavation, drainage, hardened surfaces (including buildings), intensive agriculture or any new developments within a river or wetland.

Creation of berms, roads, culverts, canalisation, channelization, alien vegetation, impoundment, abstraction, well points, storm water or other point source inflows, irrigation return flows, grazing / trampling, agriculture, golf courses, suburban gardens, artificial deepening, and drainage, should be avoided where possible within the 1:20 year flood line.