

CHAPTER FOUR: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND PUBLIC PARTICIPATION

4.1 INTRODUCTION

This Chapter of the report provides the legal context for this Environmental Impact Assessment (EIA), an overview of the approach to the EIA process, with a focus on the Public Participation process, as well as the objectives of the NEMA EIA Regulations, 2014 (as amended), GN R326, Appendix 3, as follows:

- “2.(a) *determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;*
- 3.(1)(h)(ii) *details of the public participation process undertaken in terms of Regulation 41 of the Regulations, including copies of the supporting documents and inputs;*
- 3.(1)(h)(iii) *a summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them;*
- 3.(1)(h)(vi) *the methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;”*

The generic Terms of Reference for the assessment of impacts by specialists, as contained in the approved Plan of Study for EIA, is included as Appendix 4.1 of this chapter. As required by GN R326 section 39 to 44 and Appendix 3, the steps for the EIA Phase of the Assessment are outlined in detail below. The approved Final Scoping Report (FSR) contains the details for the Scoping Phase of the Assessment Process.

Spatial planning tools, municipal development planning frameworks and instruments which have been considered in the EIA Phase of this assessment are listed below and are discussed in more detail in the various chapters of this report (Chapter One to Fourteen). Chapter One of this report includes a table, which indicates where the requirements for EIA as contained in GN R326, Appendix 3, are provided for in this report.

4.2 LEGAL CONTEXT FOR THIS EIA

Section 24(1) of NEMA (as amended) provides as follows:

"In order to give effect to the general objectives of integrated environmental management laid down in this Chapter, the potential impact of the environment of listed activities must be considered, investigated, assessed and reported on to the competent authority charged by this Act with granting the relevant environmental authorization."

The reference to "listed activities" in section 24 of NEMAA relates to the NEMA EIA Regulations, 2014 (as amended), which came into effect on the 8 December 2014 and were amended on the 7 April 2017 by Government Notice R326, 327, 325 and 324 published in Government Gazette 40772. The Government Notices published are collectively referred to as the NEMA EIA Regulations 2014 (as amended) and amongst others, comprise listed activities that require either Basic Assessment (BA), or a Scoping and Environmental Impact Assessment (S&EIA), which is to be undertaken prior to commencement of any activities on site. This proposed project requires full

S&EIA in order to obtain Environmental Authorisation for activities listed in GN R327, 325 and 324, for which the decision-making authority is the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Sarah Baartman Region. Based on the specialist assessments and refinements to the project description, Table 4.1 below indicates the listed activities as contained in GN R326, 327, 325 and 324, which require Environmental Authorisation prior to the commencement of any activities on the site.

As noted in Chapter One of this report, and in correspondence dated the 29 August 2017, DEDEAT was notified in writing of the intention to commence with a S&EIA Process for the proposed project. On the 5 October 2018, an Application Form for Environmental Authorisation, inclusive of listed activities, was submitted to DEDEAT and acknowledgement of receipt thereof was received on the 22 October 2018 and reference number EC06/C/LN2/M/47-2018 was assigned to this application. Additional comment was received from DEDEAT on 5 November 2018, requesting that a Visual Impact Assessment be included in the list of specialist studies to be undertaken during the EIA Phase of the assessment. The PoS for EIA was thus amended to include the ToR for a Visual Impact Assessment. Acknowledgment of receipt of the submission of the Final Scoping Report (FSR) was received from DEDEAT on the 16 November 2018 and acceptance of the FSR and approval of the Plan of Study for EIA was received from DEDEAT on the 19 December 2018. Chapter One, Section 1.7 of this report indicates how additional information requested by DEDEAT, in correspondence dated the 19 December 2018, has been included in the EIA Phase of this assessment. As per GN R326, Regulation 23:

- (1) *The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority - (a) an environmental impact assessment report inclusive of any specialist reports, and an EMPr, which must have been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority;*

The EIA Process is a planning, design and decision-making tool which needs to show the competent authority, DEDEAT, and the project applicant, what the consequences of their choices will be in biophysical, social and economic terms. As such, it identifies potential impacts that the project may have on the environment, as well as identify potential constraints the environment may place on the development. The EIA makes recommendations to mitigate potentially negative impacts and maximize potentially positive impacts associated with the project.

Table 4.1: Listed activities according to GN R327, 325 and 324 requiring Environmental Authorisation in terms of the NEMA EIA Regulations, 2014 (as amended).

ACTIVITY NUMBER	PROJECT COMPONENT
GN R327 (Listing Notice 1 – Basic Assessment)	
<p>GN 327 <i>19. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i></p>	<p>Internal vehicle tracks with a width of between 4 and 6 metres, as well as irrigation pipelines of varying capacities are proposed to be constructed/ installed, over five crossings, through identified drainage lines on the site. This may result in the removal of more than 10 cubic meters of soil from a watercourse. This listed activity requires Environmental Authorisation.</p>

<p>GN 327 24. The development of a road— (ii) with a reserve wider than 13,5 metres, or where no reserve exists where the road is wider than 8 metres;</p>	<p>The internal radii of the circulation areas (turning circles) around and near the pre-sort packhouse shall preferably be 18 metres or wider, as far as practically possible, to accommodate the effective flow of heavy vehicle traffic. In addition, the new entrance road (from the boundary of the site) to the logistical services area, is required to be a minimum of 8 metres wide.</p> <p>It is anticipated that the combined length of the internal roads that are required to be wider than 8 metres, may exceed 1 kilometre in length. This listed activity requires Environmental Authorisation.</p>
GN R325 (Listing Notice 2 – Full S&EIA)	
<p>GN 325 15. The clearance of an area of 20 hectares or more of indigenous vegetation ...</p>	<p>The proposed agricultural development will entail the clearance of ~516 hectares of vegetation, most of which is anticipated to be indigenous. This listed activity requires Environmental Authorisation.</p>
<p>GN 325 16. The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the highwater mark of the dam covers an area of 10 hectares or more.</p>	<p>In order to irrigate the proposed agricultural development, the construction of a new irrigation water storage dam is required. The proposed dam is anticipated to have a storage capacity of 140 000 cubic metres, a footprint of ~7 hectares and a wall height of ~6 metres. This listed activity requires Environmental Authorisation.</p>
GN R324 (Listing Notice 3 – Basic Assessment)	
<p>GN 324 2. The development of reservoirs¹, excluding dams², with a capacity of more than 250 cubic metres.</p> <p>a. Eastern Cape</p> <p>ii. Outside urban areas, in: (dd) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p>	<p>The proposed agricultural development will require the construction of a new irrigation water storage dam (reservoir), which is anticipated to have a storage capacity of 140 000 cubic metres and a footprint of ~7 hectares.</p> <p>The site is located within the Eastern Cape, outside an urban area and within ~7 kilometres of Addo Elephant National Park. The area under assessment falls within a terrestrial Critical Biodiversity Area (CBA2), in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This listed activity requires Environmental Authorisation.</p>

¹ As per the meeting with DEDEAT on 18 April 2017, the following explanation was provided for a reservoir regarding the applicability of listed activities, namely; “Reservoir: refers to a structure constructed outside of a watercourse for the off-stream storage of water. A reservoir is not considered to be a watercourse because water does not flow naturally into and out of a reservoir; it is pumped through pipes.”

² In terms of the EIA Regulations 2014 (as amended), the following definition is provided: ““**dam**” when used in these Regulations means any barrier dam and any other form of impoundment used for the storage of water, excluding reservoirs;”

<p>GN 324 4. The development of a road wider than 4 metres with a reserve less than 13,5 metres.</p> <p>a. Eastern Cape</p> <p><i>i. Outside urban areas:</i> (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;</p>	<p>The internal radii of the circulation areas (turning circles) around and near the pre-sort packhouse shall preferably be 18 metres or wider, as far as practically possible, to accommodate the effective flow of heavy vehicle traffic. In addition, the new entrance road (from the boundary of the site) to the logistical services area, is required to be a minimum of 8 metres wide.</p> <p>It is also anticipated that internal vehicle tracks, varying in width between 4 and 6 metres, will be required to service various sections of the proposed cultivated areas.</p> <p>The site is located within the Eastern Cape, outside an urban area and within ~7 kilometres of Addo Elephant National Park. The area under assessment falls within a terrestrial Critical Biodiversity Area (CBA2) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This listed activity requires Environmental Authorisation.</p>
<p>GN 324 10. The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.</p> <p>a. Eastern Cape</p> <p><i>i. Outside urban areas:</i> (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve;</p>	<p>The proposed development will require the temporary storage of ~30 cubic metres of chemicals on site, as well as the above ground storage of ~14 000 litres (14m³) of fuel. It is, therefore, anticipated that the combined capacity to store dangerous goods on site will exceed 30 cubic metres.</p> <p>The site is located within the Eastern Cape, outside an urban area and within ~7 kilometres of Addo Elephant National Park. The area under assessment falls within a terrestrial Critical Biodiversity Area (CBA2) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This listed activity requires Environmental Authorisation.</p>
<p>GN 324 12. The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>a. Eastern Cape</p> <p><i>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i></p>	<p>A portion of the vegetation on site has been identified as Albany Alluvial Vegetation by the NBA and VegMap mapping resources and this has been confirmed by the vegetation specialist.</p> <p>This vegetation type is listed as endangered in terms of Section 52 of NEMBA.</p> <p>Based on input from the vegetation specialist, the majority of this vegetation type has been excluded from the proposed development footprint. However, some internal vehicle tracks, as well as the installation of some irrigation pipelines will be required to cross this vegetation type at certain points along the identified drainage lines on the site and might thus require the combined clearance of 300 square metres thereof.</p> <p>This listed activity requires Environmental Authorisation.</p>

<p>GN 324 14. The development of— (ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs— (a) within a watercourse; (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas: (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p>	<p>Internal vehicle tracks with a width of between 4 and 6 metres, as well as irrigation pipelines of varying capacities are proposed to be constructed/ installed, over five crossings, through identified drainage lines on the site. These are likely to have a footprint which exceeds 10 square metres, within 32 metres of a watercourse.</p> <p>The site is located within the Eastern Cape, outside an urban area and within ~7 kilometres of Addo Elephant National Park. The area under assessment falls within a terrestrial Critical Biodiversity Area (CBA2) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This listed activity requires Environmental Authorisation.</p>
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4.3 LEGISLATION AND GUIDELINES APPLICABLE TO THIS EIA

As per Appendix 3 of GN R326, the scope and content of this report has been informed by the following legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, instruments, and information series documents, which are potentially applicable to this project and considered in the assessment process:

4.3.1 National Legislation

4.3.1.1 *The Constitution of the Republic of South Africa (Act 108 of 1996):*

The Constitution is the supreme law of South Africa and provides the legal framework for legislation regulating environmental management in general, against the backdrop of the Bill of Rights contained in Chapter Two of the constitution and enshrining fundamental human rights. Section 24 of the Constitution states that everyone has the right:

- “a) to an environment that is not harmful to their health or well-being; and
b) to have the environment protected, for the benefit of present and future generations through reasonable legislative and other measures that:
(i) prevent pollution and ecological degradation;
(ii) promote conservation; and
(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

Applicability to this proposed project: The proposed development must be implemented in a manner to 1) prevent pollution and ecological degradation; 2) promote conservation; and 3) secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development. The State has a duty to promulgate legislation and take other steps that ensure that these rights are upheld and that, among other things, ecological degradation and pollution are prevented.

4.3.1.2 *National Environmental Management Act (as amended) and the Environmental Impact Assessment Regulations 2014 (as amended), published under Chapter Five of NEMA (GN R326, GN R327, GN R325 and GN R324):*

The NEMA sets out a number of principles (Chapter One, Section 2) to give guidance to developers, private land owners, members of public and authorities. The proclamation of the NEMA gives expression to an overarching environmental law. Various mechanisms, such as cooperative environmental governance, compliance and non-compliance, enforcement, and regulating government and business impacts on the environment, underpin NEMA.

NEMA, as the primary environmental legislation, is complemented by a number of sectoral laws governing marine living resources, mining, forestry, biodiversity, protected areas, pollution, air quality, waste and integrated coastal management. Principle number 3 determines that a development must be socially, environmentally and economically sustainable. Principle Number 4(a) states that all relevant factors must be considered, inter alia i) that the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimized and remedied; ii) that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied; vi) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised; and viii) that negative impacts on the environment and on peoples' environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimized and remedied.

Applicability to this proposed project: The activity requires full S&EIA in order to obtain Environmental Authorisation for activities listed in GN R327, 325 and 324, for which the competent authority is the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Sarah Baartman Region. This report serves to inform the process and governing principles of NEMAA and the requirements of the NEMA EIA Regulations, 2014 (as amended).

In terms of the requirements for good governance prescribed by the Act, there is an obligation to use all available information when making decisions, and to ensure that decisions are informed by the most up to date and relevant information available.

4.3.1.3 *National Environmental Management Biodiversity Act (Act 10 of 2004):*

The NEMBA provides for the protection of listed endangered ecosystems and restricts activities according to the categorization of the area (not just by listed activity as specified in the NEMA EIA Regulations 2014 (as amended)). It promotes the application of appropriate environmental management tools to protect biodiversity. Chapter Three allows for the publication of bioregional plans. Chapter Five of the Act refers to the introduction and control of alien invasive species. The Threatened or Protected Species (TOPS) Regulations, in terms of Section 97 (Chapter Eight), requires an authorization/ permitting process to be followed.

Applicability to this proposed project: The site falls within the SRVM and no bioregional plans have been gazetted for this region. However, environmental management tools that are available for this region include, the Eastern Cape Biodiversity Conservation Plan (ECBCP), as well as the Sundays River Valley Municipality Biodiversity Sector Plan (SRVM BSP). These biodiversity planning frameworks must be consulted to inform decision making. Amongst others, these documents identify Aquatic and Terrestrial Critical Biodiversity Areas (CBAs) and Ecologically Sensitive Areas (ESAs), which are coupled with relevant land use guidelines. However, these

planning frameworks only serve as an identification tool and thus, require site verification, the results of which need to be considered by the development proposal.

Specialist input has identified that the vegetation associated with the drainage line on the property is Albany Alluvial Vegetation. Based on input from the vegetation specialist, the majority of this vegetation type (Albany Alluvial Vegetation) has been excluded from the proposed development footprint. However, it is likely that some internal vehicle tracks, as well as the installation of some irrigation pipelines will be required to cross this vegetation type at certain points along the identified drainage lines. Albany Alluvial Vegetation has been listed as an *Endangered* ecosystem in terms of Section 52 of the NEMBA.

Any threatened or protected species in terms of the NEMBA Threatened or Protected Species (TOPS) list cannot be removed without an authorization/ permit. Alien species listed in terms of NEMBA identified on a site are required to be controlled and/ or eradicated. This assessment process included a Vegetation and Aquatic Specialist Assessment, consideration of the abovementioned planning frameworks and applicable legislation. This report includes the results and recommendations of the Ecological and Aquatic Specialist Assessments (Chapter Six and Seven, respectively), which have indicated that no NEMBA *Threatened* or *Protected* species were recorded on the farm. Species listed in terms of the NEMBA Alien Invasive Species list were identified on the farm.

4.3.1.4 National Forests Act (Act 84 of 1998):

The NFA (Act 84 of 1998) allows for the protection of certain tree species. The Minister has the power to declare a particular tree to be a protected tree. According to Section 12 (1) d (read with Sections (5) 1 and 62 (2) (c)) of the National Forest Act (Act 84 of 1998), a license is required to remove, cut, disturb, damage or destroy any of the listed protected trees. The most recent list of protected tree species was published in December 2016. The Department of Agriculture, Forestry and Fisheries (DAFF) is authorised to issue permits for any removal, cutting, disturbance, damage to or destruction of any protected trees.

Applicability to this proposed project: The protected trees that commonly occur in this region are *Sideroxylon inerme* (Milkwood). The presence of these trees on site has been confirmed as part of the Ecological Specialist Assessment (Chapter Six of this report), and a permit will be required from the Department of Agriculture, Forestry and Fisheries for any removal, cutting, disturbance, damage to or destruction of any protected trees.

4.3.1.5 National Heritage Resources Act (Act 25 of 1999):

The National Heritage Resources Act (Act 25 of 1999) introduces an integrated and interactive system for the managements of national heritage resources (which include landscapes and natural features of cultural significance). The protection of archaeological and paleontological resources is the responsibility of a provincial heritage resources authority and all archaeological objects, paleontological material and meteorites are the property of the State.

Archaeology, palaeontology and meteorites:

“Section 35 (4) No person may, without a permit issued by the responsible heritage resources authority:

- a) *destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*

- b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.”

Heritage resources management:

“38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as:

- a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
- b) the construction of a bridge or similar structure exceeding 50 m in length;
- c) any development or other activity which will change the character of the site –
(i) exceeding 5000 m² in extent, or”

Applicability to this proposed project: A Phase 1 Archaeological and Paleontological Impact Assessment has been undertaken for the proposed development, as part of the EIA phase of the assessment. The East Cape Provincial Heritage Resources Agency (ECPHRA) is required to provide comment on these reports to assist DEDEAT in their decision making. In order to facilitate their input, the respective reports will be loaded onto the SAHRIS website and the ECPHRA will be provided with copies of reports during the various stages of the assessment process.

4.3.1.6 National Water Act (Act 36 of 1998):

The NWA is concerned with the overall management, equitable allocation and conservation of water resources in South Africa. It controls and manages water use in terms of water abstraction, water storage, wastewater discharge, impact on watercourses, altering watercourse flow and the determination of the Reserve. The General Authorizations in terms of Section 39 of the Act identify certain activities that require registration or licensing via the Department of Water Affairs that impact aquatic resources (watercourses and wetlands).

Section 144 states the Departments view on development surrounding water resources: 144) for the purposes of ensuring that all persons who might be affected have access to information regarding potential flood hazards, no person may establish a township unless the layout plan shows, in a form acceptable to the local authority concerned, lines indicating the maximum level likely to be reached by floodwaters on average once in every 100 years. In other words, the township developer must delineate the 1:100-year flood line on a map when developing a township.

Measures must be implemented that prevent pollution and ecological degradation of aquatic resources i.e. rivers and wetlands.

A water use licensing application or registration is generally processed in the event that a proposed development lies within 500m of wetland habitat, in close proximity to aquatic features (wetlands, dams, rivers) or where a development crosses a watercourse; in terms of Section 21(c): impeding or diverting flow in a watercourse and 21(i): altering the beds and banks etc. of a watercourse. Application is made in terms of the Dam Safety Regulations for dams exceeding 50 000 m³ and with a berm wall height exceeding 5 m in height.

Applicability to this proposed project: Due to the occurrence of water resources (wetlands, irrigation/ storage dam and watercourses) on and in close proximity to Scheepers Vlakte Farm, an

Aquatic Specialist Assessment has been undertaken. The results of the full Aquatic Specialist Assessment are included as Chapter 7 of this EIA.

It is proposed that a new dam be constructed on the Farm in order to irrigate the proposed agricultural development. The layout of the proposed agricultural development, as well as the capacity and dimensions of the proposed new dam have been informed by a qualified irrigation specialist through the EIA Process.

Confirmation is required from the Department of Water and Sanitation (DWS) whether vehicle tracks crossing portions of the identified drainage lines, the installation of irrigation pipes through portions of the identified drainage lines, the undertaking of activities within 500m of the identified wetlands, as well as within a 500m radius of the Farm, will require a General Authorisation (GA) or the submission of a Water Use Licence Application (WULA) in terms of Section 21(c) and (i) of the Water Act.

The applicant has obtained a WULA from DWS for the taking of water from a water resource in terms of Section 21(a) of the National Water Act, which entitles them to utilise 650ha (5 850 000m³ per annum) of water from the Lower Sundays River Water Users Association (LSRWUA) canal system. Water from the LSRWUA canal system is not readily available during the day and is only released during prescribed times. Balancing dam/ s are thus needed to access and temporarily store the water from the LSRWUA canal system during the prescribed time periods. DWS must confirm if a WULA will be required for the construction of the proposed dam for the temporary storage of water received from the LSRWUA scheme. The Dam Safety Regulations are anticipated to apply. The DWS has been included on the database for this project and will be provided with copies of the reports during the various stages of the assessment process

4.3.1.7 National Environmental Management: Protected Areas Act (Act 57 of 2003):

The NEMPAA provides for the declaration of Protected Areas (PAs) in three forms (Chapter Three), namely Special Nature Reserves (Part 2), Nature Reserves (Part 3) and Protected Environments (Part 4). National Parks are the equivalent of National Protected Areas. Section 10 states that a Protected Area, declared in terms of provincial legislation, is either a nature reserve or protected environment. Further, the NEMPAA: Strategy on Buffer Zones for National Parks, allows for the gazetting of buffer zones around National Parks. However, none have yet been gazetted for the Addo Elephant National Park.

In addition, focus areas for expansion of the Protected Area network in South Africa were identified through a systematic biodiversity planning process undertaken as part of the development of the 2008 National Protected Area Expansion Strategy (NPAES), as well as the 2012 Provincial Protected Area Expansion Strategy (PPAES).

Applicability to this proposed project: The nearest boundary of the Addo Elephant National Park is located ~7km east of Scheepers Vlakte Farm, therefore SANParks, as well as representatives of Addo Elephant National Park have been included on the project database and have been notified in writing of the various stages to comment on the assessment process. The comments received from SANParks during the Scoping Process are included in the Final Scoping Report.

The Addo Elephant National Park Management Plan has identified a portion of the site as a Priority Natural Area (PNA), which appears to correlate with the Sundays Doringveld (Albany Alluvial

Vegetation) mapped by the relevant planning frameworks for the site. However, input from the vegetation specialist excludes the majority of this area from the proposed development footprint. The remainder of the site, which contains Sundays Spekboom Thicket, has been designated within a Viewshed Protection Area (not yet gazetted) in terms of the AENP Management Plan. It is noted that the buffer zones in the AENP Management Plan have not yet been gazetted in terms of the NEMPAA: Strategy on Buffer Zones for National Parks. Regardless, a Visual Impact Assessment has been undertaken for the proposed development, as part of the EIA phase of the assessment.

Scheepers Vlakte Farm does not fall within a NPAES or PPAES focus area. The northern boundary of the Farm is located ~2km south of the nearest NPAES focus area.

4.3.1.8 *Conservation of Agricultural Resources Act (Act 43 of 1983):*

The objectives of the CARA (Act 43 of 1983) are to provide for the conservation of the natural agricultural resources of South Africa by the:

- Maintenance of the production potential of land;
- Combating and prevention of erosion and weakening or destruction of the water sources; and
- Protection of the vegetation and the combating of weeds and invader plants.

The CARA states that no land user shall utilise the vegetation of wetlands (a watercourse or pans) in a manner that will cause its deterioration or damage. This includes cultivation, overgrazing, diverting water run-off and other developments that damage the water resource. The CARA includes regulations on alien invasive plants. According to the amended regulations (GN R280 of March 2001), declared weeds and invader plants are divided into three categories:

- Category 1 may not be grown and must be eradicated and controlled,
- Category 2 may only be grown in an area demarcated for commercial cultivation purposes and for which a permit has been issued, and must be controlled, and
- Category 3 plants may no longer be planted and existing plants may remain as long as their spread is prevented, except within the flood line of watercourses and wetlands. It is the legal duty of the land user or land owner to control invasive alien plants occurring on the land under their control.

The provisions of Regulation 2 of CARA relate to the cultivation of virgin or new land. The landowner or applicant must obtain permission or authorisation in terms of Regulation 2 of the CARA Act, before virgin soil may be disturbed mechanically.

Applicability to this proposed project: The Vegetation Specialist Assessment has identified CARA listed species on site, which must be managed in line with the EMPr. The Land Use and Soil Management Directorate of the Department of Agriculture, Forestry and Fisheries, as well as the Provincial Department of Rural Development and Agrarian Reform, Resource Planning Section, have been included on the project database and have been notified in writing of the various stages to comment on the assessment process. The applicant has been advised of the requirement to obtain permission from these departments to cultivate virgin land.

4.3.1.9 *Other Applicable National Legislation:*

- Occupational Health and Safety Act (Act 85 of 1993), as amended by Occupational Health and Safety Amendment (Act 181 of 1993);
- Hazardous Substances Act (Act 15 of 1973)

4.3.2 Provincial and Local Legislation

4.3.2.1 Cape Nature and Environmental Conservation Ordinance (Act 19 of 1974):

The Ordinance allows for conservation of the natural environment; and the protection of wildlife. Certain biota are scheduled and, therefore, protected. A permit must be obtained from the Provincial DEDEAT, Biodiversity Section, to remove or destroy any plants listed in the Ordinance.

Applicability to this proposed project: An Ecological Specialist Assessment (Vegetation and Aquatic) has been undertaken during the EIA phase of the assessment. A number of floral species protected in terms of the Ordinance were identified on site and it is anticipated that some faunal species protected in terms of the Ordinance will also occur. A permit to remove, harm or relocate these species must be obtained from DEDEAT's Biodiversity Division which has been included on the project database and notified in writing of the various stages to comment on the assessment process.

4.3.2.2 Eastern Cape Provincial Heritage Resources Act (Act 9 of 2003):

This Act provides for the establishment of a statutory body to identify, manage, conserve and promote heritage resources in the Province and matter related thereto.

Applicability to this proposed project: As noted under 4.3.1.5, a Phase 1 Archaeological and Paleontological Impact Assessment has been undertaken for this project. The ECPHRA is registered on the project database and all reports as a result of this assessment process will be uploaded onto the SAHRIS website to facilitate their input. In addition, the ECPHRA is emailed an electronic copy of reports during the comment period for the various stages of this assessment process.

4.3.2.3 Other Applicable Provincial and Local Legislation:

- SRVM Integrated Development Plan (IDP), 2015/2016
- SRVM Spatial Development Plan (SDP), 2013
- Section 8 Zoning Scheme Regulations

4.3.3 Policies and Guidelines

The policies and plans listed below have been considered in the compilation of this report. The applicability of the relevant conservation and other planning frameworks is discussed in more detail in Chapter Three of this report and have been considered by the relevant specialists in their respective assessments.

- South African National Development Plan, 2011.
- Integrated Environmental Management Information Series (Booklets 0 to 23) published by DEA over the period 2002 to 2005.
- Integrated Environmental Management Series Guidelines:
 - Guideline 7: Public Participation in the EIA process, (DEA, 10 October 2012, No 35769).
 - Guideline on Need and Desirability (DEA 2017).
- Conservation and Other Planning Frameworks:
 - National Biodiversity Assessment (NBA).
 - National Freshwater Ecosystem Priority Areas (NFEPAs).
 - National Protected Areas Expansion Strategy (NPAES).
 - South African Heritage Resources Agency (SAHRA).
 - Agricultural Geo-Referenced Information System (AGIS).
 - Eastern Cape Biodiversity Conservation Plan (ECBCP).
 - Subtropical Thicket Ecosystem Programme (STEP).
 - Sundays River Valley Municipality Biodiversity Sector Plan (SRVM BSP).

4.4 OVERVIEW OF THE SCOPING AND EIA PROCESS

The S&EIA Process for this assessment has been divided into the following phases:

Pre-Application Scoping Phase (Completed)

- Project Announcement and Registration of I&APs (30 days)
- Draft Consultation Scoping Report Review (30 days)

Application and Scoping Phase (Completed)

- Submission of Application Form for Environmental Authorisation to DEDEAT
- Consultation Scoping Report Review (30 days)
- Submission of Final Scoping Report to DEDEAT

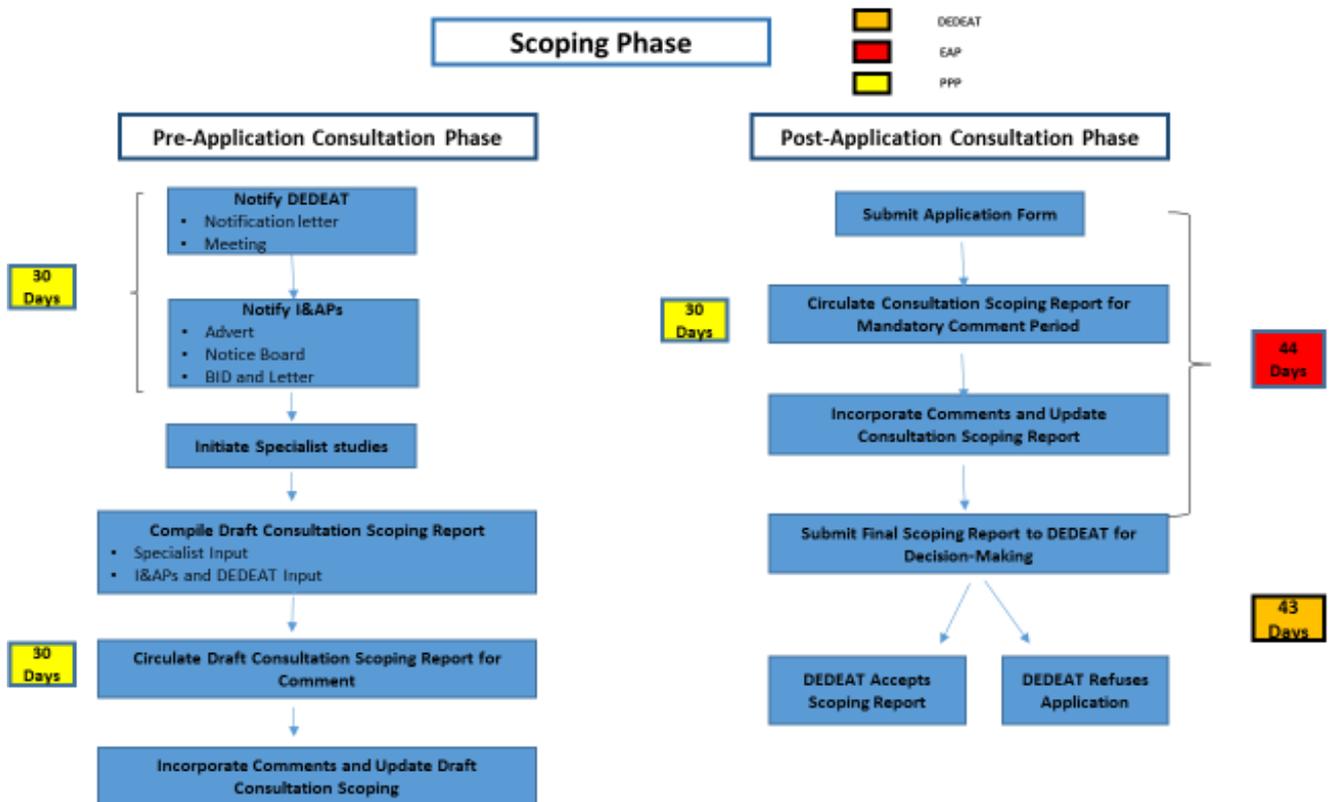
Environmental Impact Assessment Phase (Discussed Below)

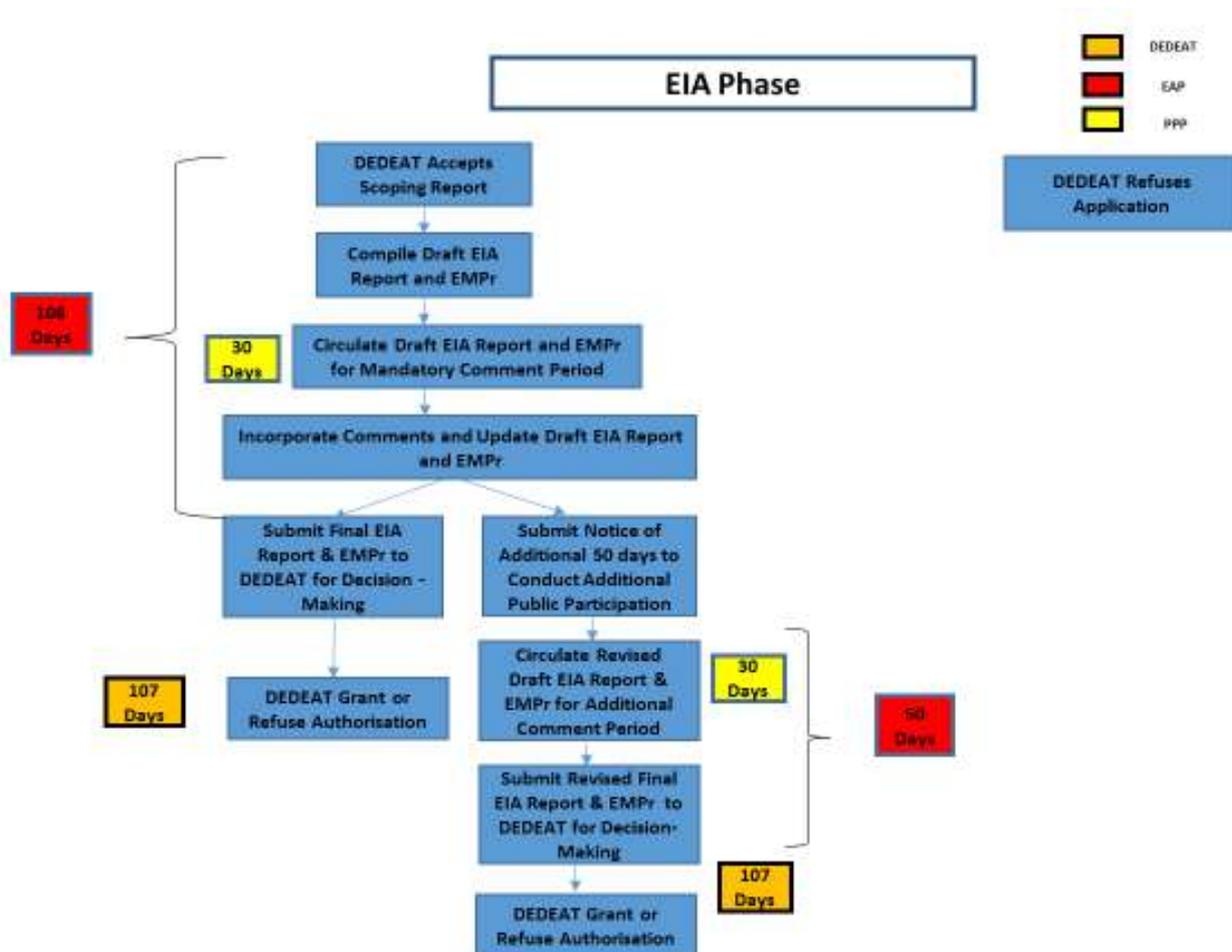
- Draft Environmental Impact Assessment Review (30 days)
- Submission of Final Environmental Impact Assessment to DEDEAT (**We Are Here**)

Decision Making and Appeal Period

- Notice of Decision and Appeal Period to I&APs

The diagram below depicts the S&EIA Process.





4.4.1 Principles for Public Participation

The S&EIA process is being driven by a stakeholder engagement process that will include inputs from the competent authority, affected/ Juristic Organs of State and State Departments, Interested and Affected Parties (I&APs), as well as specialists and the project applicant.

Guideline 7 on “Public Participation in the EIA Process”, published by DEA in October 2012, states that Public Participation is one of the most important aspects of the Environmental Authorisation process. This stems from the requirement that people have a right to be informed about potential decisions that may affect them and that they must be afforded an opportunity to influence those decisions. Effective public participation also improves the ability of the competent authority to make informed decisions and results in improved decision-making as the view of all parties are considered (DEA, 2012: pg. 5). An effective Public Participation Process could, therefore, result in stakeholders working together to produce better decisions than if they had worked independently. The Guideline (DEA, 2012) further notes that the benefits of public participation include the following:

- “it provides an opportunity for I&APs, EAPs and the competent authority (CA) to obtain clear, accurate and understandable information about the environmental impacts of the proposed activity or implications of a decision;
- it provides I&APs with an opportunity to voice their support, concerns and questions regarding the project, application or decision;
- it provides I&APs with the opportunity of suggesting ways for reducing or mitigating any negative impacts of the project and for enhancing its positive impacts;
- it enables an applicant to incorporate the needs, preferences and values of affected parties into its application;

- *it provides opportunities for clearing up misunderstandings about technical issues, resolving disputes and reconciling conflicting interests;*
- *it is an important aspect of securing transparency and accountability in decision-making; and*
- *it contributes toward maintaining a healthy, vibrant democracy.”*

The Public Participation Process has been designed to, amongst others, satisfy the requirements of Chapter Six (Regulations 39-44) of GN R326 of the NEMA EIA Regulations, 2014 (as amended), which relates to the Public Participation Process and the registration of I&APs and the acknowledgment of their comments on the proposed project. Issues raised during the Scoping Process were included in a Comments and Responses Trail of the Final Scoping Report (FSR). Comments received from I&APs after the submission of the FSR and prior to the release of the Draft EIA are included in the Comments and Responses Trail of this report and a copy thereof included in Appendix F.

Regulation 43. (1) states the following:

43. (1) ***“A registered interested and affected party is entitled to comment, in writing, on all reports or plans submitted to such party during the public participation process contemplated in these Regulations and to bring to the attention of the proponent or applicant any issues which that party believes may be of significance to the consideration of the application, provided that the interested and affected party discloses any direct business, financial, personal or other interest which that party may have in the approval or refusal of the application.”***

Public Participation is a process and vehicle to provide sufficient and accessible information to I&APs in an objective manner to assist I&APs to identify issues of concern, to identify alternatives, to suggest opportunities to reduce potentially negative or enhance potentially positive impacts, and to verify that issues and/ or inputs have been captured and addressed during the assessment process.

The primary objective of the EIA Phase of the assessment is to, through a consultative process, present to I&APs and affected/ Juristic Organs of State and State Departments an overview of the predicted impacts, proposed mitigation measures (both positive and negative), closure outcomes, residual impacts of the activity and management actions required to avoid or mitigate the negative impacts; or enhance the positive impacts of the project. The requirements of the EIA Phase of the assessment, as per the EIA Regulations, 2014 (as amended), are outlined in Chapter One of this report (section 1.6).

The sections below outline the Public Participation Process for the EIA Phase of the assessment.

4.4.2 Authority Consultation

All public participation documentation (Draft and Final Reports) will be sent to the competent authority (DEDEAT), as well as affected/ Juristic Organs of State and State Departments, which may have jurisdiction over an aspect of the project and are included on the I&AP database. Authorities are required to provide their input into the assessment process, within the timeframes stipulated. Input from authorities will be included in the Comments and Responses Trail for the EIA Process.

Prior to the commencement of the S&EIA Process for this project, a Pre-Application consultation meeting was held with DEDEAT on the 18 April 2017, notes from this meeting were included in the FSR. Notification of the intention to commence with a S&EIA Process was submitted to the

DEDEAT, Sarah Baartman Region on 29 August 2017, as well as affected/ Juristic Organs of State and State Departments on 30 August 2017. Included with this correspondence was a Background Information Document (BID), locality map and comment form.

On 5 October 2018, an Application Form for Environmental Authorisation, in order to commence the legislated portion of the S&EIA Process, in terms of the NEMA EIA Regulations 2014 (as amended), was submitted to the competent authority, prior to the release of the Consultation Scoping Report (CSR) for a legislated 30-day consultation period. Acknowledgement of Receipt of the Application Form and CSR was received from DEDEAT on 22 October 2018 and reference number EC06/C/LN2/M/47-2018 was assigned to the application. Additional comment was received from DEDEAT on 5 November 2018, requesting that a Visual Impact Assessment be included in the list of specialist studies to be undertaken during the assessment, and the Plan of Study for EIA was amended accordingly. In line with the NEMA EIA Regulations, 2014 (as amended), DEDEAT have been notified in writing regarding the relevant listed activities applicable to this project. Refer to the FSR for further information regarding communication with DEDEAT during the Scoping Phase of the assessment process.

The FSR, including the Plan of Study for EIA was submitted to DEDEAT on the 14 November 2018, and Acknowledgement of Receipt thereof was received from DEDEAT on the 16 November 2018. A site visit was held with representatives from DEDEAT on the 12 December 2018 and a copy of the attendance register is included in Appendix B of this report. On the 19 December 2018, acceptance of the FSR and approval of the Plan of Study for EIA was received from DEDEAT. Chapter One, Section 1.7 of this report indicates how additional information requested by DEDEAT, in correspondence dated the 19 December 2018, has been included in the EIA Phase of this assessment.

Notification of the 30-day I&AP review period for the Draft EIA, which extended from the 5 March 2019 to the 5 April 2019, was submitted to DEDEAT on the 5 March 2019. Included with this correspondence was a CD and hard copy of the Draft EIA Report and Draft EMPr. Acknowledgement of Receipt of the Draft EIA Report and Draft EMPr was received from DEDEAT on 7 March 2019. In correspondence dated 9 April 2019, DEDEAT noted that the additional information provided to them, sufficiently addressed the points raised in the acceptance of the FSR.

Copies of correspondence to and from DEDEAT, are attached as Appendix B to this report. In line with the NEMA EIA regulations, 2014 (as amended), the Final EIA, which has been subjected to a minimum, legislated 30-day I&AP review period, must be submitted to DEDEAT within **106 days** of the acceptance of the FSR and approval of the Plan of Study for EIA by DEDEAT, dated **19 December 2018**.

Affected/ Juristic Organs of State and State Departments which may be required to issue a licence or permit prior to commencement of the project, have been consulted and are included on the project database. Appendix D.2 includes the database of affected/ Juristic Organs of State and State Departments which may have jurisdiction over an aspect of the project, with their full contact details. The following National, Provincial and Local Government Departments, as well as affected/ Juristic Organs of State, were proactively identified and included on the database for this project prior to advertising the Scoping Process (Pre-Application Phase) and have been notified of the various stages to comment on the Scoping process:

- National and Provincial Government Departments:

- National Department of Agriculture, Forestry and Fisheries: Land Use and Soil Management
 - Provincial Department of Economic Development, Environmental Affairs and Tourism: (IEM) Competent Authority
 - Provincial Department of Economic Development, Environmental Affairs and Tourism: (Biodiversity)
 - Provincial Department of Rural Development and Agrarian Reform
 - Provincial Department of Agriculture, Forestry and Fisheries (DAFF);
 - Provincial Department of Water and Sanitation: Water Use Authorisation Sector
 - Eastern Cape Department of Transport
 - Eastern Cape Provincial Heritage Resources Agency
- Local Government, including potential affected Organs of State:
 - Sundays River Valley Municipality: Municipal Manager
 - Sundays River Valley Municipality: Ward 8 Councillor
 - Nelson Mandela Bay Municipality: Water Management and Bulk Supply
 - South African National Parks
 - Addo Elephant National Park
 - Lower Sundays River Water Users Association

Consultations with representatives of SANParks (Garden Route National Park) and Addo Elephant National Park, has taken place through written comments received, telephonic communication and a site visit on 21 June 2018. Interaction with these representatives to date is included in the FSR. Written comments were also received from DWS, regarding the proposal to establish a balancing storage dam for provision of water to the NMBM, as well as from the Water Use Authorisation sector of DWS indicating the requirement to apply for a WULA in terms of Section 21 (b) of the National Water Act. Comments from these Organs of State that were received during the Scoping Process are included in the FSR.

Affected/ Juristic Organs of State and State Departments have remained on the database for the duration of the S&EIA Process for this project and were provided with an electronic (CD or email) or hard copy of the report (format as agreed to with the respective Departments) and the report was made available on the website www.publicprocess.co.za. Comments were received from one Organ of State, Ms Maretha Alant, a representative of SANParks during the 30-day review period.

The sections below provide an overview of the tasks that have been undertaken in the EIA Phase of the assessment, with an emphasis on providing a clear record of the public participation process followed to date, to ensure that the objectives for public participation for this EIA are achieved.

4.4.3 Database Development, Maintenance and Ongoing Information Sharing

This section provides an outline of the approach to the development of the project announcement database (Pre-Application Phase), as well as the maintenance of the project database and ongoing information sharing throughout the S&EIA Process.

Prior to advertising the S&EIA Process, the EAP, drawing on experience in the local Sundays River Valley municipal area and by means of a deed search, developed an initial project database of potential I&APs for the initiation of the Scoping Process. Adjacent landowners/ tenants were identified through a deeds search (Windeed) and, where required, contact information was confirmed by telephonic communication. This project database included, amongst others, adjacent landowners/ tenants, affected/ Juristic Organs of State and State Departments, as well as the

competent authority (DEDEAT, Sarah Baartman Region), the Councillor for Ward 8 and other potential I&APs (e.g. WESSA EP Region and CREW).

All potential I&APs were notified via Letter 1, sent with normal mail, as well as email where available, of the initiation of the Scoping Process and the requirement to register their interest on the database for this project. However, the identification and registration of I&APs will be ongoing for the duration of the S&EIA Process. While not required by the Regulations, those I&APs identified at the outset of the Scoping Process will remain on the project database and will be kept informed of all opportunities to comment and will only be removed from the database by request.

Prior to advertising the S&EIA Process, the project database included 33 registered IA&Ps.

At the time of the submission of the FSR to DEDEAT, the project database included **45 registered I&APs**. The comments received during the Scoping Phase of the assessment were included in the FSR. The FSR, as accepted by DEDEAT, outlines the process for the identification and registration of I&APs during the Scoping Phase of the assessment. Comments submitted after the submission of the FSR and prior to the review period for the Draft EIA have been included in the Comments and Responses Trail below and copies of the comments are included in Appendix F of this report.

Prior to the release of the Draft EIA, Mr Anban Padayachee (SANParks) requested that Mr John Adendorff be removed from all future project databases, and that he be replaced with Mr Padayachee. The project database for the Draft EIA was amended to reflect these changes.

The I&AP details on the project database will be regularly captured and automatically updated as and when information is distributed to or received from I&APs, throughout the assessment process. This ongoing and up-to-date record of communication will be an important Public Participation component which accurately reflects the interaction with I&APs throughout the assessment process. **Prior to the release of the Draft EIA for a legislated, minimum 30-day comment period, the project database included 45 registered IA&Ps.** No additional requests to register were received during this comment period and therefore, at the time of the submission of the Final EIA, the database still included 45 registered I&APs. Appendix D.1 includes a copy of the I&AP database for the project.

4.5 PUBLIC PARTICIPATION PROCESS

The following section outlines the various steps to be followed in the Public Participation Process for the EIA Phase of the assessment. The Public Participation Process for the Scoping Phase of the assessment was outlined in detail in the FSR. While not required by the Regulations, all I&APs on the project database were notified in writing of the submission of the FSR to DEDEAT, for their decision-making. Copies of correspondence to I&APs are attached as Appendix E.

4.5.1 Draft EIA Report and EMPr Compilation

After acceptance of the FSR and approval of the Plan of Study (PoS) for EIA, the assessment moved into the EIA Phase. This entails the compilation of the Draft EIA and EMPr for a minimum, legislated 30-day I&AP and authority review period, which extended from the 5 March 2019 to the 5 April 2019. The Draft EIA and EMPr was compiled based on the specialist studies conducted for the project as outlined in the accepted FSR and approval of the PoS for EIA, received from DEDEAT on the **19 December 2018.**

4.5.2 Draft EIA and EMPr Review and Ongoing Communication

The Draft EIA and EMPr has been made available to all I&APs on the project database for a 30-day comment and review period, which extended from the 5 March 2019 to the 5 April 2019. The following indicates the process that was implemented for the distribution of information during the review of the Draft EIA and EMPr:

- Letter 5 to I&APs – Notification of comment period on Draft EIA and EMPr:
 - Letter 5 included an executive summary of the Draft EIA, as well as a comment form.
 - All I&APs on the project database were notified of the comment period on the Draft EIA and EMPr via normal mail, as well as email, where available.
 - The competent authority, affected/ Juristic Organs of State and State Departments were provided with a hard copy, or electronic version of the Draft EIA and EMPr (CD or email), as agreed to with the respective Department.
 - Letter 5, a copy of the Draft EIA and EMPr, as well as the comment form were placed on the website: www.publicprocess.co.za
- Focus Group Meetings – no one-on-one meetings with key I&APs were held during the review of the Draft EIA.
- Authority Consultation – No comments were received from State Departments having jurisdiction in respect of any aspect of the activity during the review of the Draft EIA Report. Comments were received from one Organ of State, Ms Maretha Alant, a representative of SANParks during the 30-day review period. Comments received from the competent authority were not substantive. Copies of comments received have been included in Appendix F and B of the Final EIA, respectively.

A copy of the I&AP database for the project is included in Appendix D.1 of this report and the project database for affected/ Juristic Organs of State, as well as State Departments, with contact details, is included in Appendix D.2. Proof of delivery of the Draft EIA Report to the respective Affected/ Juristic Organs of State and State Departments for review during the 30-day comment period has been included in Appendix E.

4.5.3 Submission of the Final EIA and EMPr to Authorities

In line with Regulation 23 (1) (a) of the 2014 EIA Regulations (as amended), the Final EIA, including the Comments and Responses Trail, as well as the EMPr have been compiled for submission to the DEDEAT for their decision-making, within 106 days from acceptance of the FSR and Plan of Study for EIA, dated 19 December 2018. The following indicates the process for the distribution of information during the submission of the Final EIA and EMPr:

- Letter 6 to I&APs - Notification of submission of the Final EIA and EMPr:
 - All I&APs on the project database will be notified of the submission of the Final EIA and EMPr to the competent authority, via normal mail, as well as email, where available.
 - The competent authority, affected/ Juristic Organs of State and State Departments will be provided with a hard copy, or electronic version of the Final EIA and EMPr (CD or email), as agreed to with the respective Department.
 - Letter 6, as well as a copy of the Final EIA and EMPr will be placed on the website: www.publicprocess.co.za

The Final EIA includes proof of the Public Participation Process that was undertaken to inform all registered I&APs, including the competent authority, affected/ Juristic Organs of State and State Departments, of the legislated, minimum 30-day comment and review period on the Draft EIA and EMPr.

4.5.4 Decision on Application and Appeal Period

The competent authority must, within 107 days of receipt of the Final EIA and EMPr, reach a decision with regards to the application (Environmental Authorisation Granted or Refused), in line with Regulation 24 (1) (a) and (b) of the 2014 EIA Regulations (as amended). All I&APs on the project database will be notified once the competent authority has reached a decision on the application.

In terms of Regulation 4 (2), the applicant must, within 14 days of the date of the decision, notify all I&APs on the project database of the decision and provide them with access to the decision and reasons for the decision, as well as draw their attention to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations (Letter 7 to I&APs). The following indicates the process for the distribution of information during the notification of I&APs of the decision on the application:

- Letter 7 to I&APs - Notification of the Decision and Appeal Period
 - A copy of the Environmental Authorisation Granted or Refused will be placed on the website www.publicprocess.co.za

All I&APs on the project database will be notified of the outcome of the appeal period if an appeal is lodged. This notification will be included in Letter 8 to I&APs.

4.6 IDENTIFICATION OF ISSUES

An important requirement of the EIA Process is that it should be undertaken in a consultative manner. To, inter alia, capture and respond to comments made by I&APs and authorities; to respond to comments made and indicate where this has been addressed in the assessment process; and where the comments fall beyond the assessment process to provide reasoning for such.

In accordance with the philosophy of Integrated Environmental Management, it is necessary to focus the EIA on the key issues raised. Comments received during the Scoping Phase of the assessment were captured and compiled into a Comments and Responses trail included in the FSR. Comments received since the submission of the FSR to DEDEAT and prior to the release of the Draft EIA and EMPr for I&AP review as well as during the 30-day Draft EIA review period, have been captured in the Comments and Responses Trail below (Table 4.3) Copies of these comments are included as Appendix F of this report. The issues raised have been divided into categories and the summary table below (Table 4.2) indicates in the left-hand column, the category of the issue raised. The number of issues raised per category is given in the middle column and the number of commentators per category are indicated in the right-hand column.

Table 4.2: Summary of Issues Raised.

ISSUE	NO	COMMENTATORS AND NUMBER OF ISSUES RAISED PER COMMENTATOR
1. Aquatic Impacts	1	Issues Raised After Submission of the Final Scoping Report <ul style="list-style-type: none"> • Marisa Bloem, Department of Water and Sanitation (1)
2. Project Detail	1	Issues Raised After Submission of the Final Scoping Report <ul style="list-style-type: none"> • Gerard Fick, Sunriver Citrus cc - Representative of Adjacent Landowner (1)

3. EIA and Public Participation	<u>3</u>	<p>Issues Raised After Submission of the Final Scoping Report</p> <ul style="list-style-type: none"> • Marius Calitz, Applicant Representative (1) <p><u>Issues Raised During the Review of the Draft EIA</u></p> <ul style="list-style-type: none"> • <u>Maretha Alant, SANParks Representative (2)</u>
4. Assessment of Alternatives and Conservation Planning	<u>4</u>	<p><u>Issues Raised During the Review of the Draft EIA</u></p> <ul style="list-style-type: none"> • <u>Maretha Alant, SANParks Representative (4)</u>

Comments received during the Draft EIA comment period have been included in the Final EIA Report. The comments and Responses Trail indicates the nature of the comment, as well as when and who raised the comment. The comments received will be considered by the EIA team and appropriate responses will be provided by the relevant member of the team and/ or specialist. The response provided indicates how the comment received has been considered in the Final EIA, in the project design, or in the EMPr for the project. Where the comment received falls outside of the scope of the EIA this has, as far as possible, been clearly indicated and reasons provided.

Comments on the Draft EIA and EMPr were received and documented as follows:

- Written and email comments (letters, emails and completed comment forms).
- Telephonic communication.
- One on one meetings with key authorities and/ or I&APs (none held).

Table 4.3: Comments and Responses Trail.

1. Aquatic Impacts

NO	ISSUES RAISED	COMMENTATOR	DATE	RESPONSE
Issues Raised After Submission of the Final Scoping Report and Prior to the Review of the Draft EIA and EMPr				
1.1	<p>Please find attached comments for the above mentioned project from the Department of Water and Sanitation. These comments are valid as included in the Final Scoping Report.</p> <p>The office acknowledges the receipt of the above mentioned Scoping Report. The Scoping Report was evaluated and the inputs are provided below.</p> <p>The applicant has an existing water use licence for taking of water from the Lower Sundays River Water Users Association in terms of Section 21 (a) of the National Water Act (Act 36 of 1998) which is for the abstraction of 5 850 000m³ of water per annum to irrigate 650ha. The client proposes to store water in a balancing dam during periods when water is not released at the LSRWUA canal system.</p> <p>The applicant is proposing to construct a balancing dam with a storage capacity of 140 00m³ which will trigger Section 21 (b) of the National Water Act; (Act No. 36 of 1998); storage of water from the water resource requires water use authorisation from the Department.</p> <p>The applicant is advised to undergo the process of applying for a water use licence application for the proposed water use activity.</p> <p>Please note that any use of water without authorisation as in accordance with Section 151 of the National Water Act, 1998 (Act 36 of 1998).</p>	Marisa Bloem, Dept. of Water and Sanitation	12&14 Nov2018, email & comment (dated 9Nov2018)	The applicant has been advised to undergo a Water Use Authorisation Process as per the results of the Aquatic Specialist Assessment and in consultation with DWS.

2. Project Detail

NO	ISSUES RAISED	COMMENTATOR	DATE	RESPONSE
Issues Raised After Submission of the Final Scoping Report and Prior to the Review of the Draft EIA and EMPr				
2.1	<p>Thank you for the documents with regard to the development on the remainder of portion 7 of the farm Scheepersvlakte No. 98.</p> <p>We would like to follow up on detail regarding the proposed new dam to be constructed during the proposed development phase, as stated in your Scoping Report:</p> <p><i>“a further ~7ha is required to be disturbed to facilitate the construction of a proposed new irrigation water storage dam (~140 000m³ storage capacity). Two supply pipelines are proposed to convey irrigation water from the offtake point on the canal to the proposed irrigation water storage dam. These will have an internal diameter of 450mm each and will be installed over a distance of ~700m”</i></p> <p>and</p> <p><i>“The overflow dam, just south of the southern boundary of the Farm, receives overflow from the Scheepersvlakte Dam. This has resulted in a stand of Phragmites australis, which has expanded over time, since the discharge commenced.”</i></p> <p>Our question is therefore where would this proposed dam be constructed on the proposed development map as provided in your mail. Also where and how the overflow of the proposed dam would be and the effect to the current overflow area. Would this be in the same area? Or would the overflow occur on a different identified area, if so where would this be? Also should this area be on the current overflow area, what are the mitigating factors to prevent excess overflow as the overflow water flows through our farming operation and there is a high probability that this may cause increased erosion and</p>	<p>Gerard Fick, Sunriver Citrus cc: Representative of Adjacent Landowner</p>	<p>16Nov2018, email</p>	<p>The current Nelson Mandela Bay Municipal dam on Scheepersvlakte has silted up, which has reduced the capacity of the dam and has resulted in greater than normal overflow.</p> <p>The proposed new dam associated with the proposed agricultural development on Scheepersvlakte is located ~360m north of the boundary of the commentator's property. The locality of the proposed new dam is included in Chapter Two of this report. Any overflow from the proposed new dam would eventuate into the existing Scheepersvlakte overflow, either on or off the property under assessment.</p> <p>It should further be noted that the Department of Water and Sanitation is undertaking a feasibility study for a balancing storage dam for water supply to the Nelson Mandela Bay Metro on Scheepers Vlake Farm, amongst others.</p> <p>In order to prevent and mitigate potential excess overflow from the proposed new dam, the following is proposed for the construction of the dam:</p> <ul style="list-style-type: none"> • The dam will be lined with a 200mm clay liner and not 150mm as per the normal specifications. • The freeboard height of the dam will be increased to accommodate an even smaller chance of overflow. • Telemetry monitors with warnings will be installed for certain heights to better manage 1:100-year flood events.

	<p>widening of the marsh area in our farm caused by the existing overflow of the Scheepersvlakte Dam. As you can imagine, this is an area of irritation (putting it mildly) as complaints were raised with the municipality on a continuous basis from 1997. Please see image below, area marked in blue.</p> <p>Should any detail of our query not make sense or should you have additional queries, please do not hesitate to contact either myself or Mr Bouwer.</p>			

3. EIA and Public Participation

NO	ISSUES RAISED	COMMENTATOR	DATE	RESPONSE
Issues Raised After Submission of the Final Scoping Report and Prior to the Review of the Draft EIA and EMPr				
3.1	Baie dankie vir die terugvoering. (Thank you for the feedback)	Marius Calitz, Applicant Representative	14Nov2018, email	This comment is acknowledged.

Issues Raised During the Draft EIA Comment Period				
3.2	<u>I can't open the Chapters or Draft EIA from the website, can only open appendixes. Can you perhaps email Chapter 5 and the executive summary.</u>	<u>Maretha Alant, SANParks, Environmental Planner, Garden Route National Park</u>	<u>11Mar2019, email</u>	<p>In response to this email the commentator was provided with information on how to access and open the various Chapters and Appendices of the Draft EIA, which were available on the project website for downloading. In addition, the commentator was emailed the following Chapters of the Draft EIA:</p> <ul style="list-style-type: none"> • <u>Executive Summary (as requested)</u> • <u>Chapter 2: Project Description</u> • <u>Chapter 5: Assessment of Alternatives (as requested)</u> • <u>Chapter 6: Ecological Assessment</u> • <u>Chapter 7: Aquatic Assessment</u> <p>It was further noted that a CD copy of the report was sent via registered mail to the commentator at the start of the comment period, which included all Chapters and Appendices of the Draft EIA Report.</p>
3.3	<p><u>I suggest we have a meeting to discuss an improved Site Development Plan that takes conservation adequately into consideration. SANParks may be able to assist with alien clearing.</u></p> <p><u>Please let me know about a proposed date early in April. It will be great if Andries Struwig can be present.</u></p>	<u>Maretha Alant, SANParks, Environmental Planner, Garden Route National Park</u>	<u>12Mar2019, email</u>	<p>In response to this request a meeting was requested with DEDEAT but was not able to be held during the 30-day comment period. All the comments submitted by SANParks have been included in the Draft and Final Scoping Report and in the Final EIA for the DEDEAT to consider in their decision making.</p> <p>The area proposed for conservation which meets and exceeds the targets identified in the relevant biodiversity planning frameworks are included in Chapter 6 and 7 respectively of the Draft EIA and this Final EIA.</p>

4. Assessment of Alternatives and Conservation Planning

NO	ISSUES RAISED	COMMENTATOR	DATE	RESPONSE
Issues Raised During the Draft EIA Comment Period				
4.1	<u>1. I am taking this case to the National Park Planning meeting in Pretoria on 19 March to obtain approval to negotiate a Biodiversity Stewardship agreement on the property. Regional support has been given.</u>	<u>Maretha Alant, SANParks, Environmental Planner, Garden</u>	<u>12Mar2019, email</u>	<u>This comment is noted. It should however also be noted that entering into a Biodiversity Stewardship agreement on a property is a voluntary process undertaken by a landowner. The applicant is not opposed to entering into</u>

		<p><u>Route National Park</u></p>	<p><u>discussions with SANParks with regards to a Biodiversity Stewardship agreement on the areas that are proposed as No-Go/ Conservation as per the recommendations of the various specialist studies in the Final EIA. Such discussions would however have to take into account the feasibility study that is being undertaken by the Department of Water and Sanitation (DWS) to investigate a balancing storage dam for water supply to the Nelson Mandela Bay Metro (NMBM) on this property.</u></p>
<p>4.2</p>	<p><u>2. The current 'no go' areas seem to have pipelines and roads that fragment the landscape (where no disturbance is desirable) in places as well as other infrastructure. Alternative 2 in its current format cannot be supported.</u></p>  <p><small>Map 5.1: Alternative 1 proposed to clear ~650ha of indigenous vegetation for the establishment of citrus orchards, including associated infrastructure.</small></p>	<p><u>Maretha Alant, SANParks, Environmental Planner, Garden Route National Park</u></p>	<p><u>12Mar2019, email</u></p> <p><u>The proposed main internal gravel road is a fundamental requirement to service the proposed development. Due to the location of the proposed no-go areas on the property it is not feasible to completely avoid these areas. However, in order to minimise impacts, as far as possible existing vehicle tracks on site have been identified for use as the main internal roads. In addition, the main internal vehicle tracks, as far as possible, attempt to minimise disturbance to the no-go areas and traverses the boundary of these areas, where at all possible. This is discussed in Chapter Six and Seven respectively. These internal service roads are anticipated to vary in width between 4m and 6m. It is anticipated the main internal roads will be provided with a gravel wearing course, while the vehicle tracks amongst the individual orchards will remain unpaved</u></p> <p><u>The area identified for the logistical services area was identified as a no-go area due to poor soils and not for biodiversity value. Hence the location of the logistical services in this area does not impact on conservation targets.</u></p> <p><u>Contrary to the commentator's comment, Alternative 2, is considered the preferred layout based on the recommendations of the various specialist studies undertaken for this assessment. Alternative 1 located the proposed new dam on site within the drainage line on the property. Alternative 2 has relocated the dam to fall outside of the drainage line and, in order to minimise impacts, the water pumping main will be installed</u></p>

	 <p>Map 5.2: Alternative 2 proposed to clear ~10ha of indigenous vegetation for the establishment of critical facilities and roads, including associated infrastructure. The preferred alternative is based on specialist and technical input, as well as public participation.</p>			<p>through the drainage line and within a new road proposed on this portion of the property.</p> <p>Refer to the assessment of alternatives contained in Chapter Five of this Report.</p>
<p>4.3</p>	<p>3. A landscape-scale approach that links up with adjacent CBAs/nature reserves to form a functional conservation network with a good biodiversity conservation outcome is the desired state for this CBA area. The map should state “conservation area” not only “no go” area. The best potential for a functional conservation corridor appears to be the eastern and northern portions of the property. The conservation area should be managed with an approved Management Plan.</p>	<p><u>Maretha Alant,</u> <u>SANParks,</u> <u>Environmental</u> <u>Planner, Garden</u> <u>Route National</u> <u>Park</u></p>	<p><u>12Mar2019,</u> <u>email</u></p>	<p>The farm portions adjacent to the area under assessment are all privately owned and zoned agriculture, with the exception of a portion of Farm 713 adjacent to the eastern boundary of the site which has been zoned to Public Open Space III (Private Nature Reserve). The preferred layout Alternative 2 has identified no-go areas on the eastern and northern portion of the property as highlighted by the commentator. The eastern portion is adjacent to the Public Open Space III, which could act as a conservation corridor linking into the surrounding landscape.</p> <p>The Final EIA Report includes a Construction and Operational Phase Environmental Management Programme Report, for the management of the go as well as no-go areas.</p>
<p>4.4</p>	<p>4. The applicant has obtained a Water Use Licence from DWS for the taking of water from a water resource in terms of Section 21(a) of the National Water Act which entitles them to utilise 650ha (5 850 000m³ per annum) of water from the LSRWUA canal system. In order to irrigate the proposed agricultural development, the construction of a new irrigation water storage dam (140 000m³ storage capacity; 7ha footprint), as well as the installation of irrigation pipelines of varying diameters is required.</p> <p>Size of property 852 ha. Proposed disturbance footprint</p>	<p><u>Maretha Alant,</u> <u>SANParks,</u> <u>Environmental</u> <u>Planner, Garden</u> <u>Route National</u> <u>Park</u></p>	<p><u>12Mar2019,</u> <u>email</u></p>	<p>The commentator is incorrect in noting that the default proposed was 272 ha for conservation. As per Chapter Five of the Draft and Final EIA the original proposal was for the clearance of 650 ha for orchards and setting aside of 202 ha for conservation. This initial proposal did not take into account slope or biodiversity constraints (drainage lines/ conservation of vegetation types) on the site and the impact on a potential layout. This was therefore not considered a feasible alternative.</p> <p>Subsequent to the development of Alternative 1, a</p>

	<p><u>(Go Areas) is 580 ha. Proposed no go areas is 272 ha. EIA application is for clearing of 516 ha. Conservation area should be determined taking landscape connectivity and biodiversity conservation into account. As a default 272 ha was proposed but the size may have to increase.</u></p>			<p><u>number of additional specialist studies were conducted. Based on the outcome of the specialist assessments, public participation, as well as technical input, the Alternative 1 layout was amended. Thus, the size of the area to be conserved increased from what was originally proposed.</u></p>
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4.7 CONCLUDING REMARKS

No comments have been received subsequent to the submission of the Final Scoping Report to the competent authority, which have required amendments to the scope of the specialist assessments as contained in the accepted FSR and Plan of Study for EIA. With regards to the assessment of alternatives, as contained in Chapter Five of this report, correspondence from DEDEAT, dated 19 December 2018, stated the following: *“Maintaining a buffer between the orchards and the boundary of the property must be considered as an alternative layout during the EIR phase.”* In correspondence dated 9 April 2019, DEDEAT indicated that the information contained in the Draft EIA Report sufficiently addressed the above issue.

APPENDIX 4.1: GENERIC TERMS OF REFERENCE FOR THE ASSESSMENT OF IMPACTS

The following section outlines the assessment methodology and legal context for specialist studies. The identification of potential impacts should include impacts that may occur during the construction and operational phases of the activity. The assessment of impacts is to include direct, indirect, as well as cumulative impacts.

In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed activity is well understood so that the impacts and risks associated with the activity, can be well understood. The process of identification and assessment of impacts and risks will include:

- The determination of the current environmental conditions in sufficient detail so that there is a baseline against which impacts can be identified and measured;
- The determination of future changes to the environment that will occur if the activity does not proceed;
- An understanding of the activity in sufficient detail to understand its consequences; and
- The identification of significant impacts and risks which are likely to occur if the activity is undertaken.

As per GN R 326 Appendix 2, 2. (1) (h) (i), the assessment of impacts must include the alternatives to be assessed within the preferred site, including the option of not proceeding with the activity. Alternatives that will be assessed in the EIA phase of the assessment are outlined in Chapter Five of this report. The impact assessment methodology has been aligned with the requirements for EIA Reports as stipulated in GN R 326 Appendix 3, 3. (1) of the 2014 EIA Regulations (as amended), which states the following:

“An EIA Report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include - ...

- (j) an assessment of each identified potentially significant impact and risk, including –*
- (i) cumulative impacts;*
 - (ii) the nature, significance and consequences of the impact and risk;*
 - (iii) the extent and duration of the impact and risk;*
 - (iv) the probability of the impact and risk occurring;*
 - (v) the degree to which the impact and risk can be reversed;*
 - (vi) the degree to which the impact and risk may cause irreplaceable loss of resources; and*
 - (vii) the degree to which the impact and risk can be mitigated.”*

As per Guideline Document 5: Assessment of Alternatives and Impacts, the following methodology is to be applied to the prediction and assessment of impacts and risks. Potential impacts should be rated in terms of the direct, indirect and cumulative.

- **Direct** impacts are impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.
- **Indirect** impacts of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity.
- **Cumulative** impacts are impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts.

- **Spatial extent** – The size of the area that will be affected by the impact/risk
 - Site specific
 - Local (<2 km from site)
 - Regional (within 30 km of site)
 - National
- **Consequence/Intensity** –The anticipated severity of the impact/risk
 - Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease)
 - High (severe alteration of natural systems, patterns or processes i.e. where environmental functions and processes are altered such that they temporarily or permanently cease)
 - Medium (notable alteration of natural systems, patterns or processes i.e. where the environment continues to function but in a modified manner)
 - Low (negligible alteration of natural systems, patterns or processes i.e. where no natural systems/environmental functions, patterns, or processes are affected)
- **Duration** –The timeframe during which the impact/risk will be experienced
 - Temporary (less than 1 year)
 - Short term (1 to 6 years)
 - Medium term (6 to 15 years)
 - Long term (the impact will cease after the operational life of the activity)
 - Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient)
- **Reversibility** – The degree to which the potential impacts/risks can be reversed
 - Reversible
 - Partially Reversible
 - Irreversible
- **Irreplaceable loss of Resources** - The degree to which the impact/risk may cause irreplaceable loss of resources
 - Replaceable
 - Partially Replaceable
 - Irreplaceable

Using the criteria above, the impacts will further be assessed in terms of the following:

- **Probability** –The probability of the impact/risk occurring
 - Improbable (little or no chance of occurring)
 - Probable (<50% chance of occurring)
 - Highly probable (50 – 90% chance of occurring)
 - Definite (>90% chance of occurring)
- **Significance** – Will the impact/ risk cause a notable alteration of the environment?
 - Low to very low (the impact/risk may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision-making)
 - Medium (the impact /risk will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures, and will only have an influence on the decision-making if not mitigated).
 - High (the impact/risk will result in major alteration to the environment even with the implementation of the appropriate mitigation measures and will have an influence on decision-making)
 - Very high (the impact/impact will result in very major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision-making i.e. the project cannot be authorised unless major changes to the engineering design are carried out to reduce the significance rating).

- **Status** - Whether the impact/risk on the overall environment will be positive, negative or neutral
 - “+” (positive - environment overall will benefit from the impact/risk).
 - “-“ (negative - environment overall will be adversely affected by the impact/risk).
 - “o” (neutral - environment overall will not be affected).
- **Confidence** – The degree of confidence in predictions based on available information and specialist knowledge
 - Low
 - Medium
 - High

Impacts, mitigatory measures and the monitoring of impacts will then be collated into the EMPr and these will include the following:

- Quantifiable standards for measuring and monitoring mitigatory measures and enhancements will be set. This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.
- Identifying negative impacts and prescribing mitigation measures to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Positive impacts and mitigation measures will be identified to potentially enhance positive impacts where possible.

Management Actions and Monitoring of the Impacts:

- Where negative impacts are identified, mitigatory measures will be identified to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Where positive impacts are identified, mitigatory measures will be identified to potentially enhance positive impacts.

The table below is to be used by specialists for the rating of impacts:

Table 1: Rating of impacts.

Nature of the Impact	This should include a description of the proposed impact to indicate if the impact is a direct, indirect or a cumulative impact.
Extent	Site specific, local, regional or national
Duration	Temporary, short term, medium term, long term or permanent
Consequence /Intensity	Extreme, High, medium or low
Probability	Improbable, probable, highly probable, definite
Degree of Confidence	Low, medium or High
Reversibility	Reversible, Partially Reversible, Irreversible
Irreplaceable Loss of Resources	Replaceable, Partially Replaceable, Irreplaceable
Status and Significance (without mitigation)	Low, medium or High indicating whether Positive (+), Negative (-) or Neutral (o)
Mitigation	Overview of mitigatory measures to mitigate potentially negative impacts or enhance potential positive impacts indicating how this mitigatory measure impacts on the significance of the impact
Status and Significance (after mitigation)	Low, medium or High indicating whether the status of the impact is Positive (+), Negative (-) or Neutral (o)

Other aspects to be taken into consideration in the assessment of impact significance are:

- Impacts will be evaluated for the construction and operational phases of the project:
 - **NOTE:** No assessment of impacts during the decommissioning phase of the project is proposed. The relevant guidelines and rehabilitation requirements applicable at that time will need to be applied.

- Impacts will be evaluated with and without mitigation in order to determine the effectiveness of mitigation measures on reducing the significance of a particular impact; and
- The impact evaluation will, where possible, take into consideration the cumulative effects associated with this and other facilities/ projects which are either developed or in the process of being developed in the local area.
- The impact assessment will attempt to quantify the magnitude of potential impacts (direct and cumulative effects) and outline the rationale used. Where appropriate, national standards are to be used as a measure of the level of impact.

1. Specific Aspects to be Addressed in Specialist Studies

The following specialist studies (as indicated in Table 1.1 in Chapter One) have been undertaken.

- Ecological (fauna and flora) Specialist Assessment, as well as an Aquatic Assessment to inform the preferred layout, together with the Soil Suitability Assessment. Recommendations regarding stormwater and surface water runoff management.
- A Phase 1 Paleontological Impact Assessment to identify paleontologically sensitive areas on site, if any.
- A Phase 1 Archaeological Impact Assessment to identify archaeologically sensitive features on site, if any.
- Soil Suitability Assessment in the form of a Reconnaissance Soil Survey to determine the suitability of the soil for the planting of annual crops (e.g. maize), as well as the establishment of citrus orchards, and to inform the preferred layout. This assessment will also include a desktop slope analysis.
- Traffic Impact Statement to assess safe access and egress from the site, as well the impact on the roads from the additional trip generation.
- A Roads and Wet Services Report to determine the footprint of the logistical services area, including the administration and accommodation facilities. Recommendations for the provision of bulk services (domestic water, stormwater and effluent management) for these facilities.
- A Visual Impact Assessment to assess the potential visual impact of the proposed agricultural development on the surrounding area, including the potential visual impact on the Addo Elephant National Park Viewshed Protection Area.

Based on the outcome of the various specialist assessments and consultation with the irrigation specialist, the most suitable planting plan and irrigation layout for the site has been determined.

The following provides the Terms of Reference (ToR) for each of the specialist studies. Issues included in the specialist ToR have been identified through the specialist site visit, technical team meeting and I&AP, as well as authority consultation. Additional issues identified through public and authority consultation during the Scoping Phase, as well as specialist inputs, will be included in the final Terms of Reference for specialists as contained in Chapters Six to Thirteen of this report.

1.1 *Biophysical Assessment*

The following aspects will be included in the biophysical specialist assessment:

Vegetation Assessment

- Conduct a desktop assessment of available literature to identify and describe the status of the vegetation in terms of applicable local and regional conservation planning frameworks (e.g. Vegetation Map of South Africa, National Biodiversity Assessment 2011, Eastern Cape Biodiversity Conservation Plan, Subtropical Thicket Ecosystem Project, Sundays River Valley Municipality Biodiversity Sector Plan).
 - Include the identification and evaluation of Critical Biodiversity Areas, Ecologically Sensitive Areas and Biodiversity Corridors.

- Conduct field research to identify, map and describe the current state of the vegetation on site, supported by relevant photographs.
- Determine buffer zones for sensitive areas, as well as No-Go areas on the site.
 - Identify and determine the relative abundance of Species of Special Concern within the study area (Vulnerable, Endangered or Critically Endangered and Protected).
 - Identify and determine alien species present and their distribution within the study area.
 - Determine the density of the alien vegetation and the potential for post-removal recovery of indigenous vegetation.
 - Provide a detailed vegetation sensitivity map of the site.
 - Detailed mapping of disturbance and transformation on site.
 - Identify and map sensitive or specialized habitats.
- Identify and assess impacts on conservation areas (Addo Elephant National Park).
- Identify and assess potential project related impacts (both positive and negative) for the construction and operational phases of the project using the prescribed methodology. Where feasible, include the assessment of cumulative impacts.
- Outline mitigatory measures for the future management of potential project related impacts and include, where feasible, the individuals/ organizations responsible for implementation.
- Outline management recommendations for the construction and operational phases of the project.
- Identify and assess impacts on sensitive areas and no-go areas on the site and where necessary establish buffer areas appropriate to the feature.

Faunal Assessment

- Conduct a site visit and desktop review of available literature to determine whether the study area falls wholly or partially within the distribution range of species listed as Vulnerable, Endangered or Critically Endangered and Protected.
- Identify potentially important or unique faunal habitat on site.
- Identify and assess potential project related impacts (both positive and negative) for the construction and operational phases of the project using the prescribed methodology. Where feasible include the assessment of cumulative impacts.
- Outline mitigatory measures for the future management of potential project related impacts and include, where feasible, the individuals/ organizations responsible for implementation.
- Outline management recommendations for the construction and operational phases of the project.

Aquatic Assessment

- Conduct a desktop assessment of available literature including local and regional conservation planning frameworks (e.g. National Freshwater Ecosystem Priority Areas, Eastern Cape Biodiversity Conservation Plan, Sundays River Valley Municipality Biodiversity Sector Plan) in order to identify and describe the number and extent of wetlands, drainage lines and watercourses on the site, if any.
- Conduct a site visit to confirm the presence of aquatic features and delineate wetlands and drainage lines if any are present on site.
- Provide comment on the potential impact on Aquatic Critical Biodiversity Areas, as identified in the Eastern Cape Biodiversity Conservation Plan and the Sundays River Valley Municipality Biodiversity Sector Plan.
- Make appropriate management recommendations for the EMP.
- Make appropriate recommendations for areas or features which may require a buffer zone.

1.2 Phase 1 Paleontological Impact Assessment

- Undertake a review of the relevant scientific literature, including published geological maps, satellite images, and previous fossil heritage assessments in the broader Kirkwood-Addo-Grassridge region.
- Conduct an on-site survey of the Farm to determine if any fossil materials are potentially present within the study area.

- Identify and assess potential project related impacts as per the prescribed methodology.
- Make appropriate management or mitigation recommendations in order to address the impacts identified.

1.3 Phase 1 Archaeological Impact Assessment

- Conduct an on-site survey of the area to identify any visible archaeological sites and features.
- Record all sites, features and material using GPS coordinates.
- Record site features, material and general environment with photographs.
- Compile a report and recommendations which include an assessment of the potential impacts as a result of the development on the site and proposals for mitigation and/ or protection - towards a Phase 2 and possible Phase 3 investigation.

1.4 Soil Suitability Assessment

- Undertake soil analysis to establish the suitability of the soil for the proposed cultivation of annual crops (e.g. maize), as well as for the establishment of citrus orchards.
- Identify potential constraints imposed on the proposed farming activity by the soil/ landscape characteristics of the site including a desktop slope analysis.
- Provide suitable mapping for the development, taking into account the soil suitability of the area and the biophysical site constraints (slope analysis)
- Provide amelioration measures for soils that are not suitable for the cultivation of annual crops (e.g. maize) or for commercial citrus production in their current state.

1.5 Traffic Impact Statement

- The suitability and safety of proposals for access to and egress from the site.
- The capacity of the existing and future road network within the influence radius.
- The impact of traffic generated by the proposed development in terms of traffic safety, operations and road condition, and
- The road upgrading/ management measures required to mitigate the identified impacts.

1.6 Visual Impact Assessment

- Conduct a site reconnaissance visit and photographic survey of the proposed project site;
- Conduct a desktop mapping exercise to establish visual sensitivity:
 - Describe and rate the scenic character and sense of place of the area and site;
 - Establish extent of visibility by mapping the viewsheds and zones of visual influence;
 - Establish visual exposure to viewpoints; and
 - Establish the inherent visual sensitivity of the site by mapping slope grades, landforms vegetation, special features and land use and overlaying all relevant above map layers to assimilate a visual sensitivity map;
- Review relevant legislation, policies, guidelines and standards;
- Preparation of a Visual Impact Assessment Report:
 - Assessing visual sensitivity criteria such as extent of visibility, the sites inherent sensitivity, visual sensitivity of the receptors, visual absorption capacity of the area and visual intrusion on the character of the area;
 - Assess the proposed project against the visual impact criteria (visibility, visual exposure, sensitivity of site and receptor, visual absorption capacity and visual intrusion) for the site.
 - Address and discuss the issues raised by SANParks with regards to the proposed development being in the Addo Elephant National Park Viewshed Protection Area.

2 Technical Input

The following technical input will be provided and considered in the EIA Phase of the assessment:

2.1 Irrigation Water Demand and Planting Plan

- Estimate the quantity of water required to irrigate the proposed development.
- Provide details regarding proposed dam and irrigation infrastructure requirements including a layout of the proposed irrigation infrastructure (including pivot and drip/ micro irrigation).
- Identify the location, storage capacity and dimensions of the proposed new dam on site
- Details required include pipe diameters and length, as well as dam dimensions and design.
- Proposed planting plan including irrigation infrastructure layout.

2.2 *Civil Engineering Services*

- In consultation with the project applicant and taking into account the recommendations of the various specialist assessments, the identification and design of additional infrastructure on site, namely:
 - Pre-sort packhouse (~6 500m²) and turning circle for the delivery/ collection of equipment, crops and fruit including a new entrance road;
 - Logistical services area, comprised of a workshop and storage area, administration area (offices), as well as various staff facilities under roof;
 - Staff housing.
- Estimate the domestic water consumption requirements for the proposed development and indicate the source of domestic water including proposed water supply systems.
- Estimate the domestic effluent load to be created by the development and design an effluent treatment/ storage facility with sufficient capacity to cater for the aforementioned effluent.
- Provide flood control measures that prevent loss of life and significant damage to property due to run-off from major storms and keep excess run-off away from buildings and/ or habitable units as far as practically possible.