

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 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 18 October 2016, DEDEAT was notified in writing of the intention to commence a Scoping and EIA process for the proposed project. On the 13 March 2018, an Application Form for Environmental Authorisation, inclusive of listed activities, was submitted to DEDEAT and acknowledgement of receipt thereof was received on the 27 March 2018 and reference number ECO6/C/LN2/M/11-2018 was assigned to this application. On the 20 June 2018 acceptance of the FSR and approval of the Plan of Study for EIA was received from DEDEAT. 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>9. <i>The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water-</i></p> <p><i>(i) with an internal diameter of 0,36 metres or more; or</i></p> <p><i>(ii) with a peak throughput of 120 litres per second or more;</i></p> <p><i>excluding where-</i></p> <p><i>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or...</i></p>	<p>Irrigation water for the development will be reticulated from the Lower Sundays River Water Users Association (LSRWUA) canal offtake point located on the Remainder of Farm 714, to Farm 653, via two uPVC pipes (ø450mm; throughput 280 L/s) for a distance of ~578m. The two pipelines converge into a single uPVC pipe (ø630mm; throughput 280 L/s), for a distance of ~137m across the Sundays River. Following the crossing of the river, the reticulation again splits into two uPVC pipelines (ø450mm; throughput 280 L/s) for a distance of ~7km, where it terminates at the existing dam, proposed for expansion, on Farm 653. The pipeline will be installed within the road reserve and over private land for a distance of ~8km's.</p> <p>It is anticipated that the distance over private land will exceed 1000 metres in length, thereby triggering this listed activity, which requires Environmental Authorisation.</p>

<p>13. <i>The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.</i></p>	<p>It is proposed that an existing dam (current capacity ~17 000 cubic metres) be expanded to a capacity of 45 000 cubic metres) and that three new dams with a capacity of 45 000 cubic metres each (combined capacity of 135 000 cubic metres) be constructed in order to supply the required irrigation water for the proposed development. The total combined capacity of the four dams will therefore be ~180 000 cubic metres, thereby triggering this listed activity, which requires Environmental Authorisation.</p>
<p>19. <i>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>The following project activities will trigger this listed activity:</p> <ul style="list-style-type: none"> • In order to connect to the LSRWUA canal system, which is located north of the Sundays River, an irrigation pipe (ø630mm) will be installed through the Sundays River and will require the excavation of more than 10 cubic metres of soil or rock from the watercourse during construction; and • The installation of internal irrigation infrastructure and construction of internal vehicle tracks, including the realignment of the existing access road and associated low-level gabion crossing on Farm 653 may be required through watercourses on the site. <p>These components of the project trigger this listed activity, which requires Environmental Authorisation.</p>
<p>24. <i>The development of a road – (ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;</i></p>	<p>The preferred width of the main internal distributor area should preferably be a minimum width of 8 metres near the entrance to the site. The width of the other main internal roads will vary between 8 metres and 4 metres.</p> <p>At the proposed primary access point to the administrative area, south of the MR00470, a bellmouth with a radius of ~30 metres is proposed.</p> <p>It is anticipated that the combined length of the internal access roads may exceed 1 kilometre in length.</p>
<p>GN R325 (Listing Notice 2 – full S&EIA)</p>	
<p>15. <i>The clearance of an area of 20 hectares or more of indigenous vegetation, ...</i></p>	<p>The proposed agricultural development will entail the clearance of approximately ~650 hectares of vegetation on Farm 653, most of which is anticipated to be indigenous. In addition, a further ~5.6ha is proposed to be disturbed along the pipeline corridor.</p> <p>This component of the project triggers this listed activity, which requires Environmental Authorisation.</p>
<p>GN R324 (Listing Notice 3 – Basic Assessment)</p>	
<p>2. <i>The development of reservoirs, excluding dams, with a capacity of more than 250 cubic metres.</i></p> <p>a. Eastern Cape</p> <p>ii. <i>Outside urban areas, in:</i></p> <p>(dd) <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p>(ff) <i>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;...</i></p>	<p>It is proposed that three new dams with a capacity of 45 000 cubic metres each (combined capacity of 135 000 cubic metres) be constructed in order to supply the required irrigation water for the proposed development.</p> <p>Farm 653 is located outside of an urban area, in the Eastern Cape and ~9.7 kilometres from the nearest boundary of the Addo Elephant National Park. The majority of the site has been identified as a Terrestrial CBA (BLMC2) and the entire site as an Aquatic CBA (ABLMC 2a) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>These components of the project trigger this listed activity, which requires Environmental Authorisation.</p>

<p>4. <i>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</i></p> <p>a. Eastern Cape</p> <p><i>i. Outside urban areas:</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p><i>(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;...</i></p>	<p>The preferred width of the main internal distributor area should preferably be a minimum width of 8 metres near the entrance to the site. The width of the other main internal roads will vary between 8 metres and 4 metres.</p> <p>At the proposed primary access point to the administrative area, south of the MR00470, a bellmouth with a radius of ~30 metres is proposed.</p> <p>Farm 653 is located outside of an urban area, in the Eastern Cape and ~9.7 kilometres from the nearest boundary of the Addo Elephant National Park. The majority of the site has been identified as a Terrestrial CBA (BLMC2) and the entire site as an Aquatic CBA (ABLMC 2a) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This component of the project triggers this listed activity, which requires Environmental Authorisation.</p>
<p>10. <i>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.</i></p> <p>a. Eastern Cape</p> <p><i>i. Outside urban areas:</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p><i>(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;...</i></p>	<p>The existing buildings on site will be renovated so as to accommodate a small chemical store, with a capacity to store approximately 30 cubic metres. This will be sufficient to accommodate the temporary storage of chemicals on site.</p> <p>Farm 653 is located outside of an urban area, in the Eastern Cape and ~9.7 kilometres from the nearest boundary of the Addo Elephant National Park. The majority of the site has been identified as a Terrestrial CBA (BLMC2) and the entire site as an Aquatic CBA (ABLMC 2a) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This component of the project triggers this listed activity, which requires Environmental Authorisation.</p>
<p>12. <i>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.</i></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>The proposed pipeline route from the canal to Farm 653 will cross over the Sundays River. Some of the vegetation on the banks of the river, within which the pipeline will be installed, has been identified as Albany Alluvial Vegetation in terms of the NBA mapping resources and this has been confirmed by the vegetation specialist.</p> <p>This vegetation type has been listed as an Endangered ecosystem in terms of section 52 of the NEMBA.</p> <p>The width of the pipeline route which will be disturbed is anticipated to be ~7 metres. Approximately 3600 square metres (~0.36ha) of this vegetation type may be disturbed to accommodate the installation of the pipeline.</p> <p>This component of the project triggers this listed activity, which requires Environmental Authorisation.</p>

<p>14. The development of-</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs –</p> <p>(a) within a watercourse;</p> <p>(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:</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(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>It is proposed that three new dams, with a capacity of 45 000 cubic metres each, be constructed in order to supply the required irrigation water for the proposed development. These dams along with their associated infrastructure (pump houses, inlet and outlet pipes, electrical lines and transformers) may be constructed within 32 metres of the water resources on Farm 653.</p> <p>Internal irrigation infrastructure may be established within 32 metres of the water resources on site. In addition, the proposed pipeline route from the canal to Farm 653 will be installed through the Sundays River and will pass by two artificial wetlands (farm dams), located immediately north of Portion 6 of Farm 558. The development footprint thereof is likely to exceed 10 square metres at this point. At the point where the pipeline is installed through the Sundays River a temporary dam or weir may be required which would likely exceed 10 square metres.</p> <p>Internal vehicle tracks may be constructed through watercourses on Farm 653.</p> <p>Farm 653 is located outside of an urban area, in the Eastern Cape and ~9.7 kilometres from the nearest boundary of the Addo Elephant National Park (AENP). The pipeline route is located approximately 8.2km from the AENP. The majority of the site has been identified as a Terrestrial CBA (BLMC2) and the entire site as an Aquatic CBA (ABLMC 2a) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>These components of the project trigger this listed activity, which requires Environmental Authorisation.</p>
<p>16. The expansion of reservoirs¹, excluding dams², where the capacity will be increased by more than 250 cubic metres.</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas:</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(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; or...</p>	<p>In addition to the three proposed new dams, it is proposed that an existing dam (current capacity ~17 000 cubic metres) be expanded to a capacity of 45 000 cubic metres in order to supply the required irrigation water for the proposed development.</p> <p>Farm 653 is located outside of an urban area, in the Eastern Cape and ~9.7 kilometres from the nearest boundary of the Addo Elephant National Park. The majority of the site has been identified as a Terrestrial CBA (BLMC2) and the entire site as an Aquatic CBA (ABLMC 2a) in terms of the Eastern Cape Biodiversity Conservation Plan.</p> <p>This component of the project triggers this listed activity, which requires Environmental Authorisation.</p>

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

¹As 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;"

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 Scoping and 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.

Any threatened or protected species in terms of the NEMBA Threatened or Protected Species (TOPS) list cannot be removed without an authorization/ permit. Specialist input has identified that the vegetation on the banks of the river, within which the pipeline will be installed, as Albany Alluvial Vegetation. This vegetation type has been listed as an Endangered ecosystem in terms of section 52 of the NEMBA. Alien species listed in terms of NEMBA identified on a site are required to be controlled and / or eradicated. This assessment process includes a Vegetation and Aquatic Specialist Assessment which includes a 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).

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 One Heritage 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 have been 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 a number of water resources (wetlands and watercourses) on the Farm 653, as well as the need for the proposed pipeline to be installed through the Sundays River, an Aquatic Specialist Assessment has been undertaken. The results of the full Aquatic Report are included as Chapter 7 of this EIA.

The installation of the pipeline through the Sundays River as well as the undertaking of activities within 500m of the wetlands that have been identified on Farm 653 and adjacent to the irrigation pipeline route, will likely 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 aforementioned GA or WUL applications will be submitted to the Department of Water and Sanitation (DWS), they have thus been included on the database for this project. The applicant has obtained a water use licence 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 675ha of water from the LSRWUA canal system.

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.

Applicability to this proposed project: The nearest boundary of the Addo Elephant National Park is located approximately 9.7km to the north-east of the site, therefore SANParks, as well as representatives of Addo Elephant National Park have been included on the project database and will be notified in writing of the various stages to comment on the assessment process. To date, no comment has been received from representatives of SANParks or AENP on the proposed development.

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. A permit for the cultivation of virgin land in terms of Regulation 2 of CARA has been issued to the applicant by the DAFF LUSM.

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 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 Heritage 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 (NFEPA).
 - 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 Scoping and EIA process for this assessment has been divided into the following phases:

Pre-Application Scoping Phase

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

Application and Scoping Phase

- Submit Application form for Environmental Authorisation to DEDEAT
- Review of the Consultation Scoping Report (30 days)
- Submit Final Scoping Report to DEDEAT

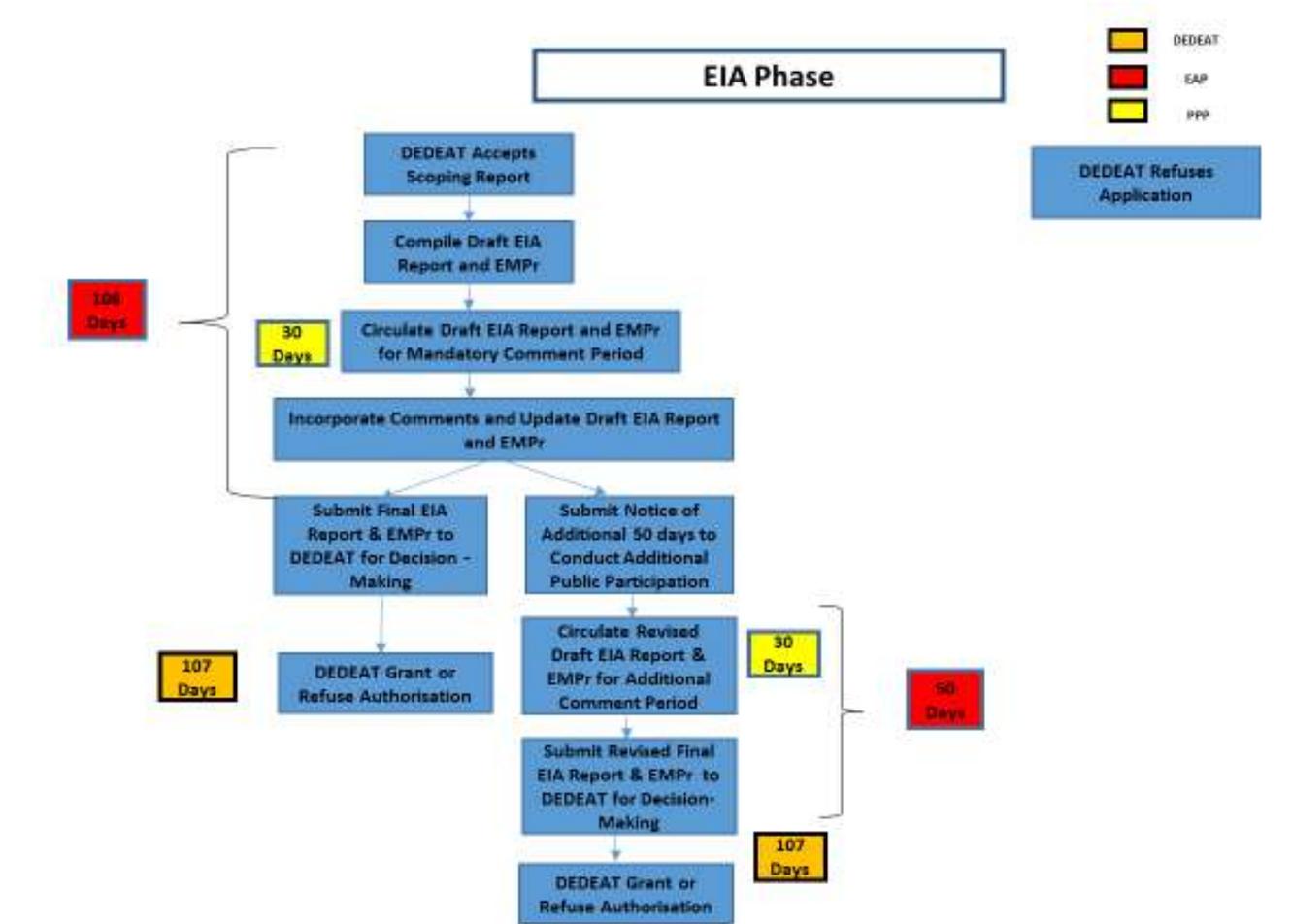
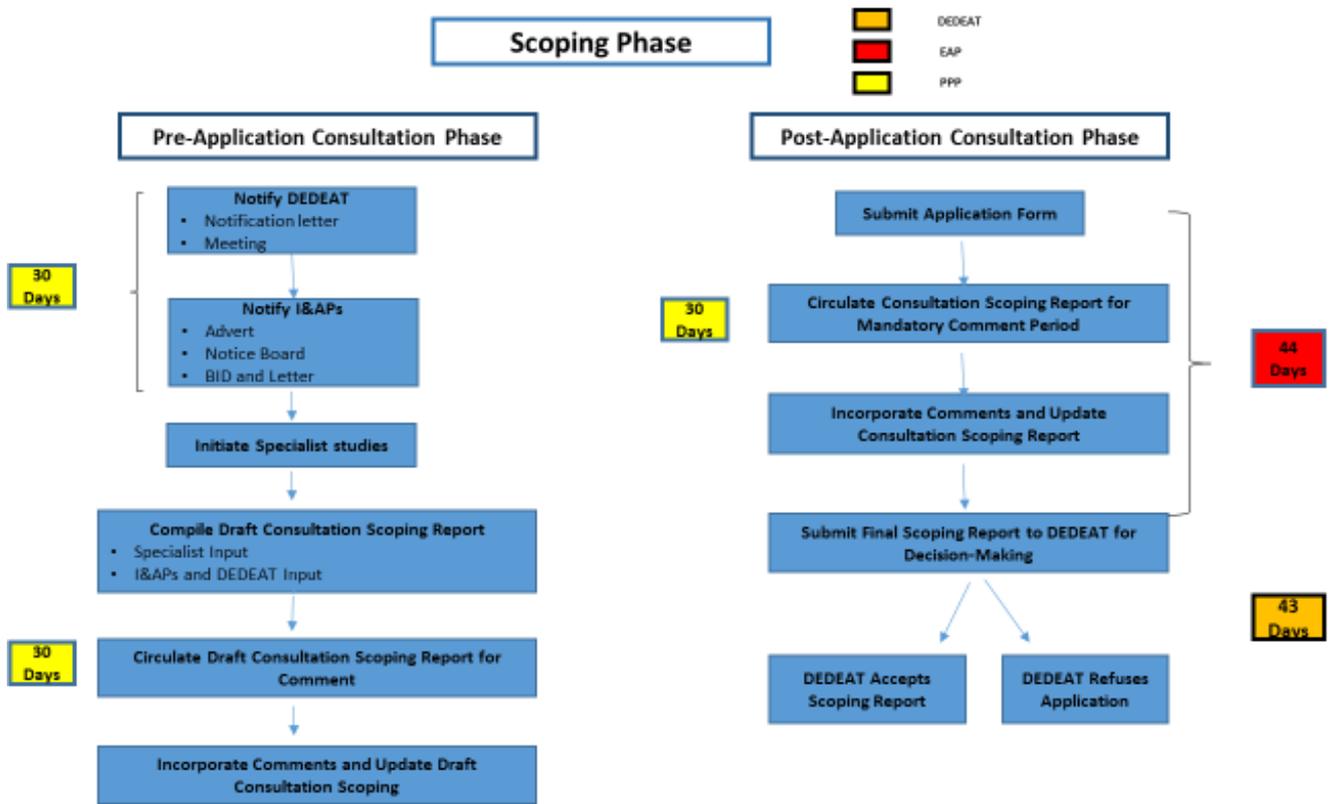
Environmental Impact Assessment Phase (discussed in detail below)

- Draft Environmental Impact Assessment (40 days) (**WE ARE HERE NOW**)
- Submit Final Environmental Impact Assessment to DEDEAT

Decision Making and Appeal Period

- Notice to I&APs of decision and appeal period

The diagram below depicts the Scoping and EIA Process.



4.4.1 Principles for Public Participation

The Scoping and EIA process is being driven by a stakeholder engagement process that will include inputs from the competent authority, affected Organs of State, Interested and Affected Parties (I&APs), 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 interested and affected parties (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. Comments received from I&APs after the submission of the Final Scoping Report 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 organs of state 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 other Organs of State, 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.

In order to initiate the Scoping and EIA process, notification of the intention to commence with a S&EIA process, was submitted to the DEDEAT, Sarah Baartman Region, as well as Organs of State on 18 October 2016. Included with this correspondence was a Background Information Document (BID), locality map and comment form.

On the 12 March 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. DEDEAT subsequently notified the EAP that the incorrect version of the Application Form had been submitted. Therefore, a revised Application Form was submitted on the 15 March 2018. Acknowledgement of receipt of the submission of the Application Form, as well as the CSR, was received from DEDEAT on the 27 March 2018 and reference number EC06/C/LN2/M/11-2018 was assigned to this application. 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. Correspondence to and from DEDEAT, are attached as Appendix B of this report

The FSR, including the Plan of Study for EIA was submitted to DEDEAT on the 26 April 2018, and acknowledgement of receipt thereof was received from DEDEAT on the 15 May 2018. On the 20 June 2018, acceptance of the FSR and approval of the Plan of Study for EIA was received from DEDEAT. Copies of correspondence received from DEDEAT are included in Appendix B of this report. In line with the NEMA EIA regulations, 2014 (as amended), the Final EIA, which has been subjected to a minimum 30 day I&AP review period, must be submitted to DEDEAT within **106 days** of the correspondence, dated **20 June 2018**.

Organs of State and/ or 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 Organs of State and/ or 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 other 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 (Potential Juristic Organs of State):
 - National Department of Agriculture, Forestry and Fisheries (DAFF);
 - Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT: EIM - Competent Authority);
 - Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT: Biodiversity Section);
 - Provincial Department of Rural Development and Agrarian Reform;
 - Department of Agriculture, Forestry and Fisheries (DAFF);
 - Provincial Department of Water and Sanitation (DWS);
 - East Cape Department of Roads and Public Works (ECDRPW);
 - East Cape Provincial Heritage Resources Agency (ECPHRA);
- Other Government Departments:
 - Sundays River Valley Municipality: Local Authority;
 - SA National Parks and Addo Elephant National Park representatives;
 - Lower Sundays River Water Users Association (LSRWUA); and
 - Sundays River Valley Municipal Ward Councillor, Ward 8
 - Transnet Freight Rail.

These Organs of State/ State Departments will remain on the database for the duration of the Scoping and EIA process for this project and receive information in the format as agreed to with the relative departments (hard copy, CD or email). Information available for I&AP review will be placed on the website www.publicprocess.co.za for the duration of the Scoping and EIA process.

The sections below provide an overview of the tasks that will be 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

The following provides an outline of the approach to the development of the Project Announcement Phase database for this project, as well as the maintenance of the database and ongoing information sharing throughout the Scoping and EIA process.

Prior to advertising the Scoping and EIA process, the EAP, drawing on experience in the local SRV municipal area and by means of a deed search, developed an initial 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. In those instances where the landowners/ tenants could not be identified through the deeds search a site visit to the respective farms was undertaken in order to establish the identity of the landowners/ tenants and record their contact information. In addition, and on the 12 October 2016, the current tenant on the property (Mr Keith Gafney) was telephonically consulted with regards to tenants on the property, which was followed up with a meeting with Mr Gafney on the 18 October 2016. On the 12 October Mr Gafney confirmed there were 7 family members living on the farm and three labourer's cottages. The seven family members were all included on the database for the project prior to the commencement of the Scoping Process. Mr Gafney was provided with letters of notification for the three labourers cottages on the farm. Subsequent to the

meeting with Mr Gafney and on the 26 February 2018, it was confirmed that the family members had all vacated the property and the labourers on site had moved with Mr Gafney to his new farm Longwood, near Amanzi.

This database included, amongst others, adjacent landowners/ tenants, affected/ juristic Organs of State and the competent authority (as outlined in Section 4.4.2 above), the Councillor for Ward 8 and other potential I&APs (e.g. WESSA EP Region and CREW). A copy of the database for the project is included as Appendix D.1 of this report and **prior to advertising the Scoping and EIA process, included 46 registered IA&Ps.**

I&APs were notified of the requirement to register their interest on the database for this project from the outset of the Scoping process, via Letter 1 to I&APs. However, the identification and registration of I&APs will be ongoing for the duration of the Scoping and 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.

At the time of the release of the FSR, the database included **63 registered I&APs.** The comments received during the Scoping process were included in the FSR. 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 included in Appendix F of this report.

The I&AP details on the 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. Appendix D.1 includes a copy of the I&AP database for the project.

The sections below provide an overview of the tasks being undertaken for the EIA phase of the assessment, with an emphasis on providing a clear record of the Public Participation process to be followed, to ensure that the objectives for Public Participation for the EIA phase of the assessment are achieved.

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 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. See copy of correspondence attached as Appendix E.

4.5.1 Compile Draft EIA Report and EMPr

After acceptance of the FSR and approval of the Plan of Study (PoS) for EIA, the assessment moves 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, in this instance, has been increased to a **40-day comment period.** The Draft EIA and EMPr has been 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 the competent authority, DEDEAT.

4.5.2 Review of the Draft EIA (and EMPr) and Ongoing Communication

The Draft EIA and EMPr will be made available to all I&APs on the project database for a 40-day review period. The following indicates the public participation process that will be implemented for the review of the Draft EIA and EMPr in order to provide I&APs with an opportunity to submit comments on the Draft EIA and to facilitate access to information:

- Letter 5 to I&APs - All I&APs on the project database will be notified in writing of the release of the Draft EIA and EMPr for public review. Included with this notification will be an Executive Summary of the Draft EIA and a comment form.
- Key I&APs - (Competent Authority, Councilor, and Juristic Organs of State) will be provided with either a hard copy or electronic version of the report, as agreed to with the respective Departments.
- Report to be placed on the project website www.publicprocess.co.za
- Focus Group Meetings – one on one meetings with key I&APs are not planned to form part of this process, however, such will be held upon request. Notes from meetings held will be included as an appendix to the Final EIA Report, as well as be included in the Comments and Responses trail.
- Authority Consultation – organs of state having jurisdiction in respect of any aspect of the activity will be consulted and their input will be included in the Final EIA as agreed to with the relevant Department.

A copy of the I&AP database is included as Appendix D.1 of this report, and at the time of release of the Draft EIA included **62 registered I&APs**. The database for organs of state, with contact details, is included as Appendix D.2 of this report.

4.5.3 Compilation of the Final EIA and EMPr for Submission 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 will be compiled for submission to the DEDEAT for their decision making, within 106 days from acceptance of the FSR (20 June 2018). The following process will be followed regarding the notification to I&APs and authorities of the submission of the Final EIA.

- Letter 6 to I&APs: Notification of submission of the Final EIA
- Report Distribution
 - Relevant organs of state and key I&APs will be provided with a hard copy or electronic version of the report, as agreed to with the respective Departments
 - Report to be placed on the project website www.publicprocess.co.za

The Final EIA will also include proof of the public participation process that was undertaken to inform all registered I&APs, including organs of state, of the availability of the Draft EIA for the 40-day comment and review period.

4.5.4 Decision on Application and Appeal Period

The competent authority must, within 107 days of receipt of the Final EIA, 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 registered I&APs 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 process will be followed for the notification of the decision:

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

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 therefore.

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 Final Scoping Report. Comments received since the submission of the Final Scoping Report to DEDEAT, and prior to the release of the Draft EIA for I&AP review 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. EIA and Public Participation	2	Issues Raised After Submission of the Final Scoping Report <ul style="list-style-type: none"> • Sello Mokhanya, EC Provincial Heritage Resources Agency (1) • Abhilash Alex, Transnet Freight Rail (1)

Comments received during the Draft EIA comment period will be included in the Final EIA Report. The comments and responses trail will indicate 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 will indicate 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 will, as far as possible, be clearly indicated and reasons provided. Input from the project technical team may be required in responding to some of the comments received.

Comments on the Draft EIA and EMPr will be 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 (as requested)

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				
1.1	<p>Please find attached comments from the Department of Water and Sanitation for the above mentioned project.</p> <p>Please ignore previous correspondence, indicating that no further comments would be submitted and apologies for any inconvenience caused.</p>	Marisa Bloem, Dept of Water and Sanitation	4May2018, email & letter	The comments submitted by DWS and attached to this email are included in the Comments and Responses Trail below.
1.2	<p>Reference is made to the Final Scoping Report (FSR) dated April 2018 submitted to this Department.</p> <p>After the review of the FSR it is noted that the proposed infrastructure will be located within the regulated areas of watercourses. The proposed activities will trigger water uses in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act no. 36 of 1998).</p> <p>Investigation by Aquatic Specialist for all watercourses (rivers, drainage lines and wetlands) within the study area and the assessment of the impacts of the proposed development on the affected watercourses and delineation must be done. The regulated areas of watercourses that will be affected by the proposed activities (including the pipelines, dams, roads, planting area, etc) must be indicated in a layout plan.</p> <p>Please note that any use of water (as stipulated under Section 21) without an authorization is a contravention as in accordance with Section 151 of the National Water Act, 1998 (Act 36 of 1998).</p>	Marisa Bloem, Dept of Water and Sanitation	4May2018, email and letter	<p>The results of the Aquatic Specialist Assessment are included in Chapter 7 of this report. This includes the delineation of all rivers, drainage lines and wetlands which may be affected by the various project components. Detailed layout plans for the project have been included in Chapter 2 and Appendix H of this report.</p> <p>The applicant has been advised of the requirement to submit the relevant application to the Department of Water and Sanitation.</p>

2. EIA and Public Participation

NO	ISSUES RAISED	COMMENTATOR	DATE	RESPONSE
Issues Raised After Submission of the Final Scoping Report				
2.1	Please use this email address below from now onwards and not this Gmail one: smokhanya@ecphra.org.za	Sello Mokhanya, EC Provincial Heritage Resources Agency	26April2018, <i>email</i>	This comment is noted and the database has been amended.
2.2	The contact person will be the Maintenance Manager – Obed Risenga 041 507 4257	Abhilash Alex, Transnet Freight Rail	25April2018, <i>email</i>	This comment is noted and Mr Risenga has replaced Mr Alex on the I&AP database.

4.7 CONCLUDING REMARKS

No comments have been received subsequent to the submission of the Final Scoping Report which have required amendments to the scope of the specialist assessments as contained in the accepted FSR and Plan of Study for EIA. In addition, no input has been received with regards to the assessment of alternatives as contained in Chapter Five of this report.

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.

- Biophysical (fauna and flora) specialist assessment, as well as an aquatic assessment to inform the proposed layout for the project together with the soil suitability assessment. Recommendations regarding stormwater and surface water runoff management.
- A Heritage Impact Assessment to identify heritage features on site, if any.
- Soil Suitability Assessment in the form of a Reconnaissance Soil Survey to be conducted to determine the suitability of the soil for the establishment of citrus orchards, and to inform the proposed layout.
- Traffic Impact Statement to assess safe access and egress from the site, as well the impact on the road of the additional trips to be generated.

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 and 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 Ten of this report.

1.1 *Biophysical Assessment*

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

Vegetation

- Conduct a desktop assessment of available literature in order 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 in order 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.

Fauna

- 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 CBAs as identified in the ECBCP and the SRVM Biodiversity Sector Plan.
- Make appropriate management recommendations for the EMPr.
- Make appropriate recommendations for areas or features which may require a buffer zone.

1.2 Heritage Impact Assessment

- Desktop study to identify any potential paleontologically or archaeologically significant features or material on site.
- Conduct a survey of archaeological resources likely to be impacted by the proposed development.
- Map and photograph any identified resources and evaluate their heritage significance in terms of the grading system outlined in section 3 of the NHRA (Act 25 of 1999).
- Compile a report and recommendations which include an assessment of the potential impacts as a result of the development on the sites, and proposals for mitigation and/or protection - towards a Phase 2 and possible Phase 3 investigation.
- Make recommendations as to how the developer should conserve, or mitigate damage to, these resources.

1.3 *Soil Suitability Assessment*

- Undertake soil analysis to establish the suitability of the soil for the proposed establishment of citrus orchards and cultivated crops.
- Identify potential constraints imposed on the proposed farming activity by the soil / landscape characteristics of the site.
- Provide suitable mapping for the development taking into account the soil suitability of the area and the biophysical site constraints.
- Provide amelioration measures for soils that are not suitable for commercial citrus production in their current state.

1.4 *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.

2 **Technical Input**

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

2.1 *Irrigation Water Demand*

- An estimate of the increase in irrigation water usage and how this will be accommodated in the existing water entitlements.
- Provide details regarding dam and irrigation infrastructure requirements including a layout of the proposed irrigation infrastructure.
- Details required include pipe diameters and length, as well as dam dimensions and design.