

SITE SENSITIVITY VERIFICATION (SSV) REPORT: THE PROPOSED ESTABLISHMENT OF A WASTEWATER TREATMENT WORKS AND ASSOCIATED INFRASTRUCTURE FOR THE AUGRABIES VILLAGE ON THE REMAINDER OF ERF 169, AUGRABIES

INTRODUCTION:

This Site Sensitivity Verification (“SSV”) Report was undertaken in terms of the *Protocols for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes* (referred to “the Protocols” hereafter) as per Government Notice No. 320 (published in Government Gazette No. 43110 on 20 March 2020)¹. These Protocols, effected as on the 09 May 2020, must be complied with for every new application submitted after the effective date. According to the Protocols, the EAP must verify the current use of the proposed site for development as well as the site’s environmental sensitivity, in accordance with the DFFE Screening Tool Report, to determine the need for specialist inputs in relation to the themes (and proposed specialist assessments) included in the Protocols.

METHODOLOGY:

The SSV Report was compiled based on desktop studies including the SANBI BGIS Biodiversity Spatial Plan, vegetation maps (Vegetation map of SA (Mucina & Rutherford, 2006, as updated in the 2012 beta version and 2018 Final), NFEPA, GoogleEarth imagery, CapeFarmMapper. In addition, a site visit was conducted on 10 April 2025 to investigate, identify, and evaluate potential impacts associated with the proposed development on the receiving environment. The SSV Report was compiled by Maboe Nthejane (EAPASA Reg. No. 2022/4942).

AIM OF THE SSV REPORT:

The aim of the SSV Report is to;

- Verify land use and theme sensitivities as identified by the DFFE Screening Tool;
- Confirm or motivate against the need for a particular specialist assessment(s) as indicated by the DFFE Screening Tool; and
- Should the need for a specialist assessment be refuted/challenged, provide a motivation as to why the proposed specialist assessment is not applicable to the proposed development.

¹ The Protocols are in line with Section 24(5)(a) and (h) and Section 44 of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998).

SITE DESCRIPTION:

The oxidation ponds at the existing Kakamas Wastewater Treatment Works ("WWTW") are no longer able to adequately treat the volumes of wastewater delivered to the WWTW, from Kakamas and surrounding villages. The upgrading or refurbishment of the existing WWTW is not considered viable due to its close proximity to a residential area. The use of several smaller decentralized WWTW in Kakamas and the surrounding villages is therefore proposed instead.

The development proposal entails the establishment of a new WWTW and associated infrastructure, on the Remainder of Erf 169, Augrabies which is located next to the intersection of Malva and Angeler Streets (See Figure 1).

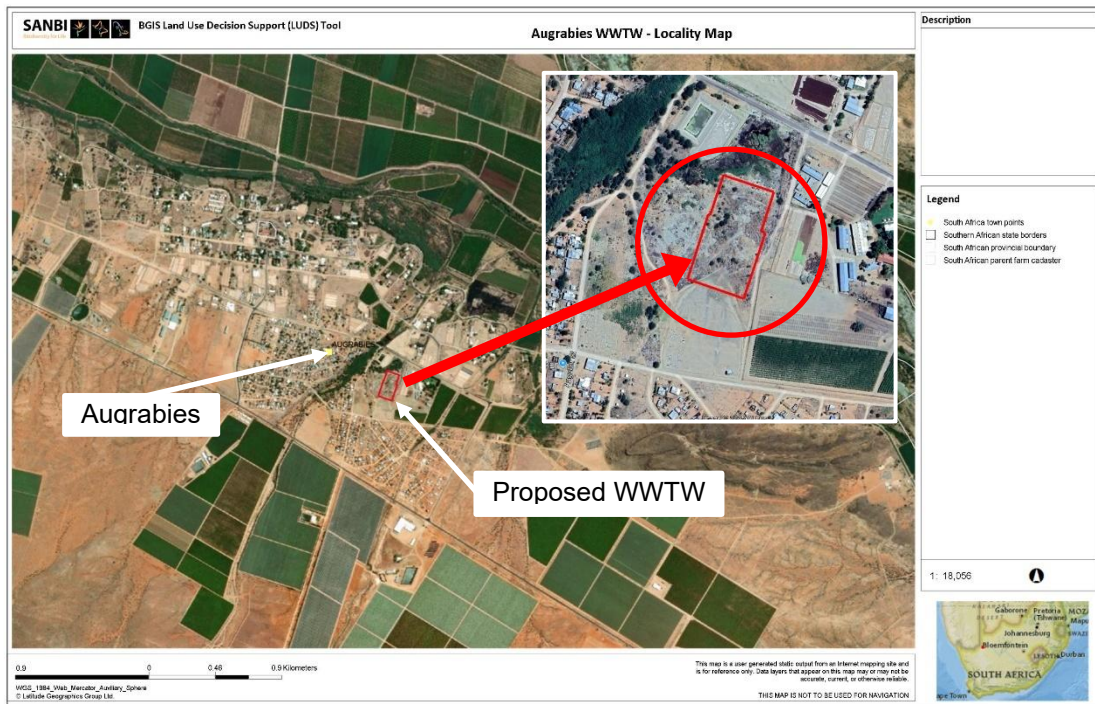


Figure 1: SANBI BGIS image of the locality of a new proposed WWTW in Augrabies

Approximate site coordinates: 28° 40' 24.17 "S; 20° 25' 57.50 "E

Construction of a 500m³/day Aerated Facultative Pond system for Augrabies Village and surrounds, comprising the following:

- Operational Building/Shelter
- Inlet Works (inclusive of Tanker Truck discharge facility)
- Screenings Removal
- Grit Channels
- Flow measurement
- Facultative Ponds x 2 (lined with HDPE membrane)
- Wind powered Floating Aerator/Mixers
- Medium Bubble Diffused Air aeration system Stainless Steel
- Low Pressure Centrifugal Fan c/w Motor
- Electrical Switchgear & DO Control System
- Aerobic Ponds x 2 (lined with HDPE membranes)
- Disinfection facility
- Irrigation equipment for disposal of Effluent on sports fields
- 22kV x 1.5km overhead Electrical Power supply line + Transformer

In accordance with the 2018 Vegetation Map of South Africa, Lesotho and Swaziland, the proposed site would historically have been covered by one broad vegetation type, namely Bushmanland Arid Grassland which is categorised as “Least Threatened”.

The development footprint will not be located within 32m any Freshwater Ecosystems Priority Area (FEPAs) nor any other notable rivers or wetlands. However, there is evidence of nearby ephemeral streams and associated riparian vegetation which should be assessed.

The proposed WWTW footprint falls within a Critical Biodiversity Area (CBA) 2 and the potential impacts of this will need to be assessed by a specialist.

Please see photographs taken on 10 April 2025 below:



Photo 1: Image northeast of the proposed site, showing the pond/wetland.



Photo 2: Image of the eastern section of the proposed site, looking north with the two existing concrete dams in the background



Photo 3: Image of the southern section of the proposed site, next to the cemetery, showing dumping.



Photo 4: Image looking from east to west of the proposed site, showing dumping in the foreground (eastern section of site).



Photo 5: Image from the northern section of the proposed site, looking north to south with the two existing concrete dams in the foreground.



Photo 6: Image of the cemetery to the south of the proposed site.

Table 1. Themes and associated sensitivity as per the DFFE Screening Tool.

No	Theme	DFFE Sensitivity	Agree / Disagree	Proposed Sensitivity	Motivation
1	Agriculture Theme	Very High Sensitivity	Disagree	Low	The proposed site is located close to a residential area and this would pose a significant security risk to any nearby agricultural enterprise. All the same, a specialist has been appointed to compile a specialist study report that will inform the application.
2	Animal Species Theme	High Sensitivity	Agree		A specialist has been appointed to compile a specialist study report that will inform the application.
3	Aquatic Biodiversity Theme	Low Sensitivity	Disagree	Medium	A specialist has been appointed to compile a specialist study report that will inform the application for environmental authorisation.
4	Archaeological and Cultural Heritage Theme	Low Sensitivity	Agree		A specialist has been appointed to compile a specialist study report that will inform the application.
5	Civil Aviation Theme	Medium Sensitivity	Disagree	Low	<p>A WWTW does not pose any kind of significant risk to civil aviation and so a specialist will not be appointed to compile a specialist study report that will inform the application. The EAP is of the view that the significance rating for the Civil Aviation Theme should be Low unlike the High significance rating indicated in the Screening Tool Report.</p> <p>However, the Civil Aviation Authority will be requested to provide comment on the application for environmental authorisation.</p>
6	Defence Theme	Low Sensitivity	Agree		The proposed WWTW and associated infrastructure is unlikely to cause any significant impacts relating to the country's defence.
7	Plant Species Theme	Medium Sensitivity	Agree		A specialist has been appointed to compile a specialist study report that will inform the application.
8	Terrestrial Biodiversity Theme	Very High Sensitivity	Agree		A specialist has been appointed to compile a specialist study report that will inform the application.

Table 2. Specialist assessments identified as per the DFFE Screening Tool.

No	Proposed Specialist Assessment	Verification of Site Sensitivity And Motivation On The Need For Specialist Investigation
1	Landscape/ Visual Impact Assessment	The low height, small scale and nature of the proposed development make it unlikely that any significant visual impact will result on the proposed site. The specialist study is therefore deemed unwarranted and a specialist will not be appointed to conduct the study.
2	Archaeological and Cultural Heritage Impact Assessment (HIA)	A specialist has been appointed to compile a specialist study report that will inform the application.
3	Palaeontological Assessment	A specialist has been appointed to compile a specialist study report that will inform the application.
4	Terrestrial Biodiversity Assessment	A specialist has been appointed to compile a specialist study report that will inform the application.
5	Aquatic Biodiversity Impact Assessment	A specialist has been appointed to compile a specialist study report that will inform the application.
6	Socio-Economic Assessment	The proposed development is unlikely to cause any kind of significant changes in the socio-economic characteristics of Kakamas. A specialist will therefore not be appointed to compile a socio-economic impact study report to inform the application for environmental authorisation.
7	Plant Species Assessment	A specialist has been appointed to compile a specialist study report that will inform the application.
8	Animal Species Assessment	A specialist has been appointed to compile a specialist study report that will inform the application.

All the Specialist Assessments and Compliance Statements compiled by specialists and the written opinions of other suitably qualified professionals will be appended to the Basic Assessment Report and submitted to the competent authority for review.

Please do not hesitate to contact EnviroAfrica for any further information or clarity regarding the above.

Yours faithfully,

Maboee Nthejane



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