

SOVENTIX PHASE 3 SOLAR ENERGY FACILITY

SITE SENSITIVITY VERIFICATION



PRODUCED FOR ECOLEGES



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SHORT CV/SUMMARY OF EXPERTISE – SIMON TODD

 <p>3Foxes Biodiversity Solutions ECOLOGICAL SPECIALIST SERVICES Assessment/Management/Research</p>	<p>Simon Todd Pr.Sci.Nat Director & Principle Scientist C: 082 3326502 Simon.Todd@3foxes.co.za</p> <p>23 De Villiers Road Kommetjie 7975</p>	Ecological Solutions for People & the Environment
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Simon Todd is Director and principal scientist at 3Foxes Biodiversity Solutions and has over 20 years of experience in biodiversity measurement, management and assessment. He has provided specialist ecological input on more than 200 different developments distributed widely across the country, but with a focus on the three Cape provinces. This includes input on the Wind and Solar SEA (REDZ) as well as the Eskom Grid Infrastructure (EGI) SEA and Karoo Shale Gas SEA. He is on the National Vegetation Map Committee as representative of the Nama and Succulent Karoo Biomes. Simon Todd is a recognised ecological expert and is a past chairman and current deputy chair of the Arid-Zone Ecology Forum. He is registered with the South African Council for Natural Scientific Professions (No. 400425/11).

Skills & Primary Competencies

- Research & description of ecological patterns & processes in Nama Karoo, Succulent Karoo, Thicket, Arid Grassland, Fynbos and Savannah Ecosystems.
- Ecological Impacts of land use on biodiversity
- Vegetation surveys & degradation assessment & mapping
- Long-term vegetation monitoring
- Faunal surveys & assessment.
- GIS & remote sensing

Tertiary Education:

- 1992-1994 – BSc (Botany & Zoology), University of Cape Town
- 1995 – BSc Hons, Cum Laude (Zoology) University of Natal
- 1996-1997- MSc, Cum Laude (Conservation Biology) University of Cape Town

Employment History

- 2009 – Present – Sole Proprietor of Simon Todd Consulting, providing specialist ecological services for development and research.
- 2007 Present – Senior Scientist (Associate) – Plant Conservation Unit, Department of Botany, University of Cape Town.

- 2004-2007 – Senior Scientist (Contract) – Plant Conservation Unit, Department of Botany, University of Cape Town
- 2000-2004 – Specialist Scientist (Contract) - South African National Biodiversity Institute
- 1997 – 1999 – Research Scientist (Contract) – South African National Biodiversity Institute

A selection of recent work is as follows:

Strategic Environmental Assessments

Co-Author. Chapter 7 - Biodiversity & Ecosystems - Shale Gas SEA. CSIR 2016.

Co-Author. Chapter 1 Scenarios and Activities – Shale Gas SEA. CSIR 2016.

Co-Author – Ecological Chapter – Wind and Solar SEA. CSIR 2014.

Co-Author – Ecological Chapter – Eskom Grid Infrastructure SEA. CSIR 2015.

Contributor – Ecological & Conservation components to SKA SEA. CSIR 2017.

Recent Specialist Ecological Studies in the Vicinity of the Current Site

Environmental Impact Assessment for the Proposed Komsberg East and Komsberg West Wind Farms and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment. Arcus Consulting 2014.

Proposed Rietkloof & Brandvallei Wind Farms and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment Report. EOH 2016.

Proposed Gunstfontein Wind Farm and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment Report. Savannah Environmental 2016.

Mainstream South Africa Dwarsrug Wind Energy Facility: Fauna & Flora Specialist Impact Assessment Report. Sivist 2014.

Phezukomoya and San Kraal Wind Energy Facilities and associated grid connection. Fauna and Flora specialist studies. Arcus Consulting 2018.

Kokerboom Wind Energy Facilities (1-4) and associated grid connections. Fauna and Flora specialist studies. Aurecon 2017.

SPECIALIST DECLARATION

I, ..Simon Todd....., as the appointed independent specialist, in terms of the 2014 EIA Regulations, hereby declare that I:

- I act as the independent specialist in this application;
- I perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I have no vested interest in the proposed activity proceeding;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- I have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- all the particulars furnished by me in this specialist input/study are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist: _____



Name of Specialist: ____Simon Todd_____

Date: ____20 June 2022_____

1 INTRODUCTION

Soventix South Africa (Pty) Ltd is proposing the development of a 400 MW Solar Photovoltaic (PV) facility and associated infrastructure (Phase 3) on the Remainder of Farm Goede Hoop 26C, Portion 3 of Farm Goede Hoop 26C and other properties, between De Aar & Hanover, Emthanjeni Local Municipality, Pixley Ka Seme District Municipality, Northern Cape Province, South Africa. Ecoleges is conducting the required EIA process for the authorisation of the development and 3Foxes Biodiversity Solutions has been appointed by Ecoleges, on behalf of Soventix South Africa to provide specialist terrestrial fauna and flora specialist input on the proposed solar PV facility as part of the EIA application.

In terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) Environmental Impact Assessment (EIA) Regulations (4 December 2014, Government Notice (GN) R982, R983, R984 and R985, as amended), various aspects of the proposed development may have an impact on the environment and are considered to be listed activities. These activities require authorisation from the National Competent Authority (CA), namely the Department of Forestry, Fisheries and the Environment (DFFE), prior to the commencement thereof.

In accordance with GN 320 and GN 1150 (20 March 2020) ¹ of the NEMA EIA Regulations of 2014, prior to commencing with a specialist assessment, a site sensitivity verification must be undertaken to confirm the current land use and environmental sensitivity of the proposed project area as identified by the National Web-Based Environmental Screening Tool (Screening Tool). 3Foxes Biodiversity Solutions has been commissioned to verify the sensitivity of the Soventix Phase 3 PV project site under these specialist protocols.

2 RELEVANT ASPECTS OF THE DEVELOPMENT

The Soventix Phase 3 site is located in the Northern Cape Province, off the N10 between De Aar and Hanover. The size of the proposed development footprint for the 400 MW solar PV facility is approximately 650 ha. This area includes four interconnected 100 MW solar PV plants (ca. 125 ha each), with associated infrastructure. The PV system will be connected via transmission lines to the authorised substation on Phase 1. The substation ties into the existing ESKOM 400 kV overhead powerlines. Existing roads will be used for main access, which may need to be enlarged to allow large equipment to access the site during construction. The location of the Soventix Phase 3 PV development is illustrated below in Figure 1.

¹ GN 320 (20 March 2020): Procedures for The Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(A) and (H) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation

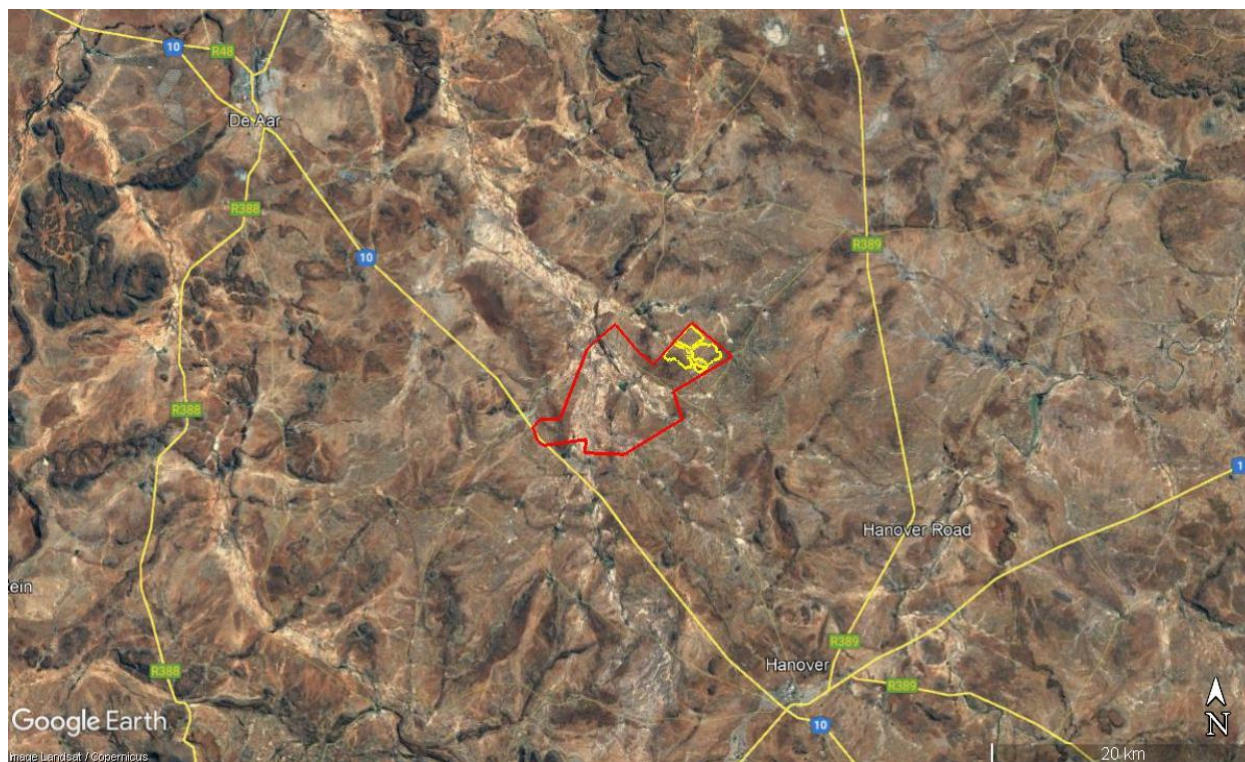


Figure 1. Satellite image showing the location of the proposed Soventix Phase 3 project located off the N10 between Hanover and De Aar in the Northern Cape. The yellow blocks indicate the footprint of the current Phase 3 project and the red, indicates the larger farm property within which the project is housed.

3 DFFE SITE VERIFICATION

Government Notice No. 320, dated 20 March 2020, includes the requirement that an Initial Site Sensitivity Verification Report must be produced for a development footprint. The outcomes of the Site Verification Report determine the level of assessment required for the site. The outputs of the Screening Tool are illustrated and briefly discussed below for each theme as relevant to the current study and related to the results of the field assessment and associated site verification.

3.1 Site Visit

The site was visited for the current Phase 3 study on the 15th and 16th of March 2022. Conditions during the site visit were excellent for sampling as there had been good rains leading up to the site visit, with the result that vegetation was green and growing well and all of the pans and water bodies present on the site were filled with water. Apart from the current site visit, the wider site, but including the Phase 3 site, was also previously sampled in March 2017 over four full days. During the field assessments, all of the access roads within the site were driven and the site was investigated at various points of interest that were observed in the field or had been identified

from satellite imagery of the site. This included rocky outcrops, pans, dams and gravel patches where present. These areas were searched for fauna such as amphibians and reptiles. In the 2017 survey, the site was also trapped for small mammals using Sherman live traps. Walk-through plant surveys were conducted across the site and a total of 68 different plant species were recorded within the development footprint. No plant species of conservation concern were observed at the site and given the good conditions at the time of sampling, there are few limitations in this regard.

3.2 Animal Species Theme

The DFFE Screening Tool identified almost the entire site as having a medium animal sensitivity theme due to the potential presence of two listed avifaunal species. However, avifauna are assessed under a separate specialist study and are not discussed any further here. Refer to Table 1 and Figure 2 below for the Animal Theme results.

In terms of the site verification, no faunal species of concern were observed at the site during the site verification. In terms of fauna of concern that may be present on the site, but which are not listed under the DFFE Screening Tool, the only species that may be present on the site is the Black-footed Cat *Felis nigripes* (VU). However, as there are no recent records from near the site, it is considered to be low sensitivity for this species. Overall, the site has no features of high value for fauna within the development footprint and it is considered low sensitivity for mammals, reptiles and amphibians as a result.

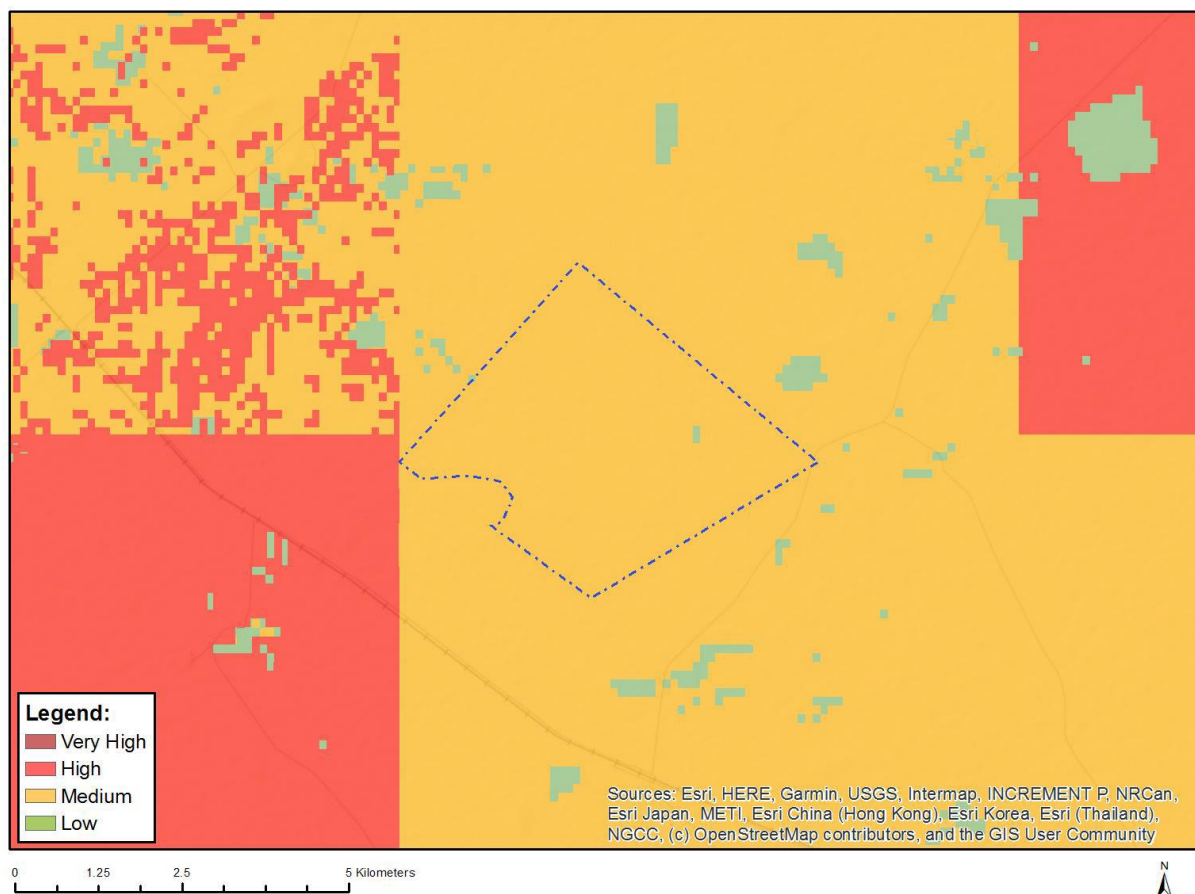


Figure 2. Animal Species Theme Sensitivity Map for the Soventix Phase 3 site.

Table 1. Animal Species Theme Features

Sensitivity	Feature(s)
Medium	<i>Aves-Neotis ludwigii</i>
Medium	<i>Aves-Aquila rapax</i>

3.3 Plant Species Theme Sensitivity

The DFFE Screening Tool indicates that there are no known botanical sensitivities from the Soventix Phase 3 study area (Figure 3). The field assessment and site verification confirmed the overall low sensitivity of the site. A total of 68 different plant species were recorded from the Soventix Phase 3 study area and no species of concern were observed on the site and it is considered to be low sensitivity for the Plant Species Theme.



Figure 3. Plant Species Theme Sensitivity Map for the area around the Soventix Phase 3 site.



Figure 4. Typical open plains vegetation of the Soventix Phase 3 site, corresponding with the Northern Upper Karoo vegetation type.

3.4 Terrestrial Biodiversity Theme Sensitivity.

The overall combined Terrestrial Biodiversity theme indicates that the site consists largely of Very High sensitivity areas associated with an extensive ESA that includes the site as well as the surrounding area, (Figure 5 and Table 2). Since these are anthropogenic conservation planning-based features, it is not really possible to verify these features in the field, apart from an assessment of their condition and characteristics. Based on the presence of these features within the site, a full terrestrial biodiversity assessment is required.

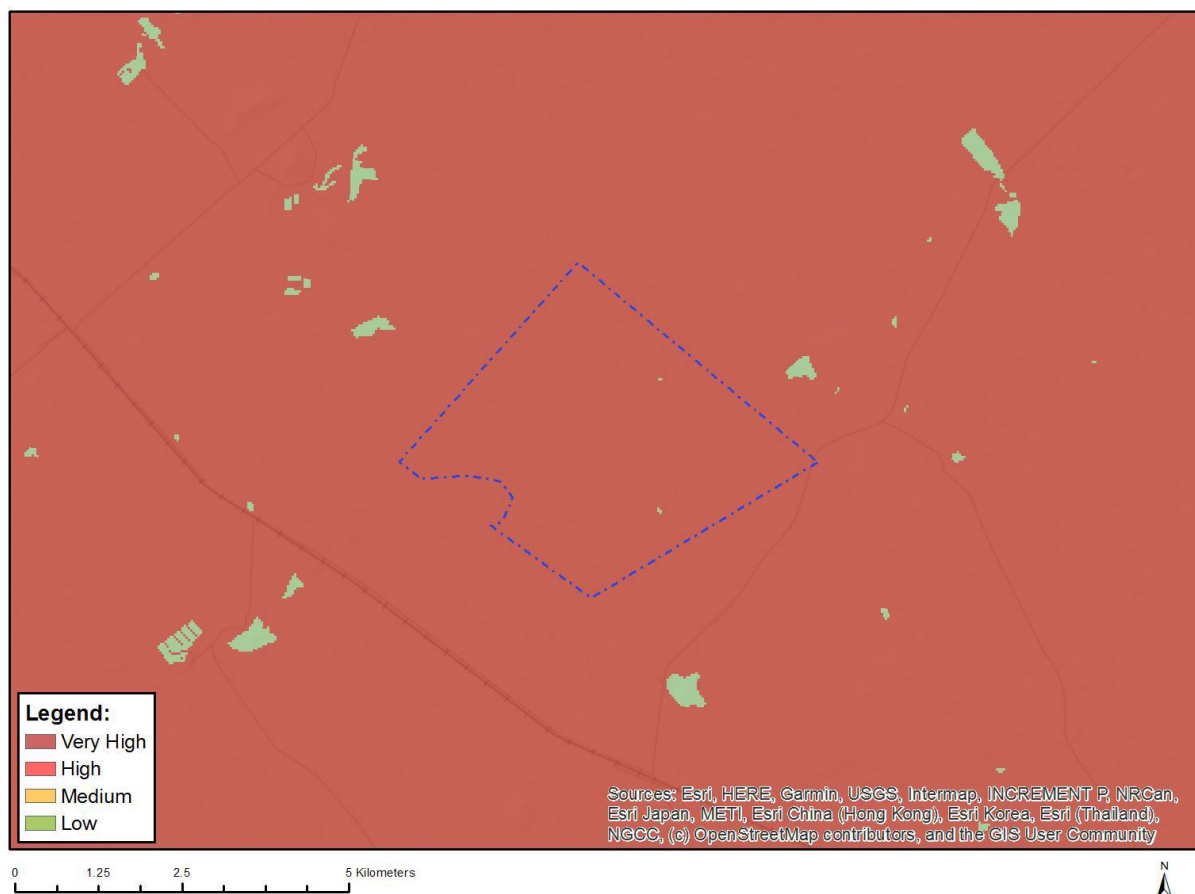


Figure 5. Terrestrial Biodiversity Theme Sensitivity Map of the Soventix Phase 3 site and surrounds.

Table 2. Terrestrial Biodiversity Theme Features for the Soventix Phase 3 study area.

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Ecological Support Area 2

4 CONCLUSIONS & IMPLICATIONS OF THE SITE VERIFICATION

Based on the results of the site verification for the Soventix Phase 3 PV Project, the following studies are required in the EIA process for terrestrial ecology:

- Animal Species Compliance Statement
- Plant Species Compliance Statement
- Terrestrial Biodiversity Assessment