

- **DEA Request:**

- iv. The Terms of Reference for the Palaeontological Impact Assessment was not included in the FSR. Please provide the Department with this information.

- **EAP Response:**

Palaeontological Impact Assessment

A palaeontological impact assessment will be conducted, the primary objective of which is to determine whether there are any indications that the proposed site is of palaeontological significance. This will be a phase 1 assessment and will be largely desk-top although a site visit will be required to enable the specialist the opportunity to look for significant artefacts/fossils on the surface of the site. It is not expected that a more detailed Phase 2 assessment will be required but this remains to be confirmed.

The terms of reference for the Phase 1 palaeontological study will be to:

- Provide a summary of the relevant legislation;
- Conduct a site inspection as required by national legislation
- Determine the likelihood of palaeontological remains of significance in the proposed site;
- Identify and map (where applicable) the location of any significant palaeontological remains;
- Assess the sensitivity and significance of palaeontological remains in the site;
- Assess the significance of direct and cumulative impacts of the proposed development and viable alternatives on palaeontological resources;
- Identify mitigatory measures to protect and maintain any valuable palaeontological sites and remains that may exist within the proposed site.
- Prepare and submit any permit applications to relative authorities

This has been included in the Plan of Study for the EIA and is included in Chapter 10, Section 10.1.1 (page 64) of the FSR.

- **DEA Comment:**

- v. Appendix C5: Register of I&APs does not indicate the following key stakeholders:

- Occupiers of land adjacent to the site
 - Ward Councillor

- **EAP Response:**

The occupiers of the land adjacent to the site are included and are labelled as Surrounding Neighbours (pg. 106), reproduced below for your convenience.

Surrounding Neighbours

Name	Association	Email
Robert White	Table Hill (South)	watty1@telkomsa.net
Geoff Brown	Brack Kloof	glenambrose@imagineit.co.za
John White	Hilton Farm	hiltonfarm@telkomsa.net
John Dell	Hounsloop	dell@johndelldorpers.co.za
Grant Soul	Aptrac Aviation	grant@aptrac.com
Mark Bristow	Nuritex Inv Pty Ltd	MBristow@randgoldresources.com
Tony Phillips	Slaaikraal Farm	buck@imagineit.co.za
Trevor Hoole	Hounsloop	tthoole@gmail.com

The Ward Councillor, Ms. Marcelle Booysen (Ward 3) was notified of the proposed development on the 30th of July 2013 (proof of notification is included below).

From: Justin Green <j.green@cesnet.co.za>
To: 'marcellebooyesen@makana.gov.za'
Cc:
Subject: Proposed development of the Makanaone Solar Energy Projects

Sent: Tue 2013/07/30 08:16 AM



Message BID - Riebeeck East - Solar.pdf (986 KB) Municipality and Key Stakeholders.pdf (131 KB)

Dear miss Booysen

Please find attached a copy of the inception notification for the Environmental Impact Assessment process for proposed Makanaone Solar Photovoltaic Energy projects in the Riebeeck East area, Eastern Cape.

The proposed projects include 4 separate solar farms. Attached is the Background Information Documents (BID) that provide further information including maps showing the proposed project areas. The Scoping reports for the proposed projects can also be found on our website (<http://www.cesnet.co.za/public-documents.html>).

If you have any comments or questions, please do not hesitate to contact me.

Regards

Justin Green
Environmental Consultant

Coastal & Environmental Services
67 African Street, Grahamstown, 6139
P.O. Box 934, Grahamstown, 6140
Tel: 046 622 2364

- **DEA Request:**

Also provide proof that these key stakeholders have been given written notification of the proposed listed activities associated with this application.

- **EAP Response:**

Stakeholders were notified of the listed activities in the BID that was distributed during the initiation period of the project. In addition to this the listed activities were also included in the Draft Scoping Report within the Executive summary as well as in Chapter 1, page 2.

Included in this document is a copy of the BID (Appendix B), and proof that this was sent to various stakeholders (Appendix A). The listed activities in the Final Scoping Report are on page 2.

Based on issue ii raised above, the application form has been amended and resubmitted to the authorities for approval. All registered I&APs will be informed of the amended application and listed activities therein.

- **DEA Request:**

vi. The site visit brought to light that there is a conservancy in the area of the proposed PV plant. Please provide the Department with a map of the conservancy.

- **EAP Response:**

As can be seen from the Figure 3, and as discussed under issue one above, the Makanaone Watt Hill Solar Photovoltaic Energy Project falls outside the 5 km buffer zone around the Aylesbury protected area as specified in the EIA Regulations (**Listed activity GNR. 546, Section 13 (c) ii (ff)**). Figure 3 shows the location of this protected area in relation to the site and has been incorporated into the Final Scoping Report in Chapter 1, page 6.

- **DEA Request:**

vii. The Department requires that a Socio-Economic Study be performed to ascertain the potential impacts of the proposed development on the community. This study must include of job creation and the availability of the proposed trust fund for the community use.

- **EAP Response:**

The Terms of reference for a socio-economic study is included in the FSR in the Plan of Study (Chapter 10, page 71). For your convenience it is reproduced below.

Socio-Economic Impact Assessment

The specific Terms of Reference for the Socio - Economic Impact Assessment will include:-

- Review of all relevant literature e.g. Visual and Agricultural Impact Assessments, Grahamstown/Riebeeck East IDP, Tourism Sector Plan, Benchmark studies, etc.
- Visit the Makanaone Table Hill Solar site.
- Review the Grahamstown/Riebeeck East IDP and assess the economic impact of the solar energy project on all sectors of the economy within the LM area in terms of:
 - Contribution to economic growth in the region (Direct and Indirect) – Gross Domestic Product per Region (GDP);
 - Impact on regional development (business and other) ;
 - Impact on productivity and production (sales, etc.) of existing farms in the region;
 - Impact on infrastructure and resources in the region;
 - Improved competitiveness of the region.
- Assess the impact of the solar energy project on tourism growth in the study area.
- Conduct an initial socio-economic needs analysis of the identified areas in collaboration with Makanaone Table Hill (Pty) Ltd and local authorities which will also include:
 - Impact on employment;
 - Impact on income;
 - Impact on social lives of local communities;
 - Impact on social upliftment;
 - The analysis should also identify the key industries which operate within the identified areas and identify if possible LED projects that will stimulate the economy.

- Assess as far as possible the potential impact of the Makanaone Watt Hill solar energy project on property prices in the study area.
- Assess the economic impact of the Makanaone Table Hill solar energy project on inward investment i.e. will it encourage or discourage investment to the study area.
- Assess the costs and benefits of the Makanaone Table Hill solar energy project to the local economy.

- **DEA Request:**

viii. Please ensure that the methodology for the impact assessment in the Plan of Study comply with all the relevant regulatory requirements for the impact assessment.

- **EAP Response:**

According to Section 31(2)(l) of the NEMA regulations an assessment of each identified potentially significant impact, must include:

- (i) cumulative impacts;
- (ii) the nature of the impact;
- (iii) the extent and duration of the impact;
- (iv) the probability of the impact occurring;
- (v) the degree to which the impact can be reversed;
- (vi) the degree to which the impact may cause irreplaceable loss of resources; and
- (vii) the degree to which the impact can be mitigated;

Included below is the CES rating scale, please note that all aspects included above have been incorporated into the methodology.

METHODOLOGY FOR ASSESSING THE SIGNIFICANCE OF IMPACTS

Specialists are required to provide the reports in a specific layout and structure, so that a uniform specialist report volume can be produced. To ensure a direct comparison between various specialist studies, standard rating scales have been defined for assessing and quantifying the identified impacts. This is necessary since impacts have a number of parameters that need to be assessed.

Five factors need to be considered when assessing the significance of impacts, namely:

1. Relationship of the impact to **temporal** scales - the temporal scale defines the significance of the impact at various time scales, as an indication of the duration of the impact.
2. Relationship of the impact to **spatial** scales - the spatial scale defines the physical extent of the impact.
3. The severity of the impact - the **severity/beneficial** scale is used in order to scientifically evaluate how severe negative impacts would be, or how beneficial positive impacts would be on a particular affected system (for ecological impacts) or a particular affected party.

The severity of impacts can be evaluated with and without mitigation in order to demonstrate how serious the impact is when nothing is done about it. The word 'mitigation' means not just 'compensation', but also the ideas of containment and remedy. For beneficial impacts, optimization means anything that can enhance the

benefits. However, mitigation or optimization must be practical, technically feasible and economically viable.

4. The **likelihood** of the impact occurring - the likelihood of impacts taking place as a result of project actions differs between potential impacts. There is no doubt that some impacts would occur (e.g. loss of vegetation), but other impacts are not as likely to occur (e.g. vehicle accident), and may or may not result from the proposed development. Although some impacts may have a severe effect, the likelihood of them occurring may affect their overall significance.

Each criterion is ranked with scores assigned as presented in the table below to determine the overall **significance** of an activity. The criterion is then considered in two categories, viz. effect of the activity and the likelihood of the impact. The total scores recorded for the effect and likelihood are then read off the matrix presented in the table below, to determine the overall significance of the impact. The overall significance is either negative or positive.

Ranking of Evaluation Criteria

EFFECT	Temporal scale	
	Short term	Less than 5 years
	Medium term	Between 5 and 20 years
	Long term	Between 20 and 40 years (a generation) and from a human perspective almost permanent.
	Permanent	Over 40 years and resulting in a permanent and lasting change that will always be there
LIKELIHOOD	Spatial Scale	
	Localised	At localised scale and a few hectares in extent
	Study area	The proposed site and its immediate environs
	Regional	District and Provincial level
	National	Country
	International	Internationally
	Severity	Benefit
	Slight / Slight Beneficial	Slight impacts on the affected system(s) or party(ies). Slightly beneficial to the affected system(s) or party(ies).
	Moderate / Moderate Beneficial	Moderate impacts on the affected system(s) or party(ies). An impact of real benefit to the affected system(s) or party(ies).
	Severe / Beneficial	Severe impacts on the affected system(s) or party(ies). A substantial benefit to the affected system(s) or party(ies).
	Very Severe / Very Beneficial	Very severe change to the affected system(s) or party (ies). A very substantial benefit to the affected system(s) or party(ies).
	Likelihood	
	Unlikely	The likelihood of these impacts occurring is slight
	May Occur	The likelihood of these impacts occurring is possible
	Probable	The likelihood of these impacts occurring is probable
	Definite	The likelihood is that this impact will definitely occur

Ranking matrix to provide an Environmental Significance

Environmental Significance	
LOW	An acceptable impact which for which mitigation is desirable but not essential; The impact by itself is insufficient even in combination with other low impacts to prevent the development. These impacts will result in either positive or negative medium to short term effects on the social and/or natural environment.
MODERATE	An important impact which requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which in conjunction with other impacts may prevent its implementation These impacts will usually result in either positive or negative medium to long term effects on the social and/or natural environment
HIGH	A serious impact which, if not mitigated, may prevent the implementation of the project. These impacts would be considered by society as constituting a major and usually long term change to the (natural and/or social) environment and result in severe effects or beneficial effects.
VERY HIGH	A very serious impact which may be sufficient by itself to prevent the implementation of the project. The impact may result in permanent change. Very often these impacts are unmitigable and usually result in very severe effects, or very beneficial effects

The **environmental significance** scale is an attempt to evaluate the importance of a particular impact. This evaluation needs to be undertaken in the relevant context, as an impact can either be ecological or social, or both. The evaluation of the significance of an impact relies heavily on the values of the person making the judgment. For this reason, impacts of especially a social nature need to reflect the values of the affected society.

Cumulative Impacts

Cumulative Impacts affect the significance ranking of an impact because it considers the impact in terms of both on-site and off-site sources. For example, the noise generated by an activity (on-site) may result in a value which is within the World Bank Noise Standards for residential areas. Activities in the surrounding area may also create noise, resulting in levels also within the World Bank Standards. If both on-site and off-site activities take place simultaneously, the total noise level at the specified receptor may exceed the World Bank Standards. For this reason it is important to consider impacts in terms of their cumulative nature.

Seasonality

Although seasonality is not considered in the ranking of the significance, it may influence the evaluation during various times of year. As seasonality will only influence certain impacts, it will only be considered for these, with management measures being imposed accordingly (i.e. dust suppression measures being implemented during the dry season).

Prioritising

The evaluation of the impacts, as described above is used to prioritise which impacts require mitigation measures. Negative impacts that are ranked as being of "VERY HIGH" and "HIGH" significance will be investigated further to determine how the impact can be minimised or what alternative activities or mitigation measures can be implemented. These impacts may also assist decision makers i.e. lots of **HIGH** negative impacts may bring about a negative decision. For impacts identified as having a negative impact of "MODERATE"

significance, it is standard practice to investigate alternate activities and/or mitigation measures. The most effective and practical mitigations measures will then be proposed. For impacts ranked as "LOW" significance, no investigations or alternatives will be considered. Possible management measures will be investigated to ensure that the impacts remain of low significance.

I hope that the above responses to the received comments meet the needs of the Environmental Officer. If you have any further questions or comments please do not hesitate to contact us at the numbers below.

Justin Green

Environmental Consultant

Tel: 046-622 2364
Fax: 046-622 6564
Email: j.green@cesnet.co.za

APPENDIX A - Notification to Surrounding Land Owners

From: Justin Green <j.green@cesnet.co.za> Sent: Thu 2012/06/07 10:54 AM
To: 'thinus@hellspoort.co.za'; 'gro@cybertrade.co.za'; 'MBristow@randgoldresources.com'; 'grant@aptrac.com'; 'pohlands@imaginec.co.za'; 'mvonhasseln@gmail.com'; 'lee@rockdale.co.za'; 'rpearse@pehotels.co.za'; 'brianncathy@mweb.co.za'; 'p.rose@ru.ac.za'; 'anele.kwayimani@webmail.co.za'; 'palmer@itsnet.co.za'; 'fim.dbn@vodamail.co.za'; 'angus@kwandwe.co.za'; 'mandisa.mondi@transnet.net'
Cc: Jadon Schmidt
Subject: CES : Inception notification for an Environmental Impact Assessment

Message  **BID - Riebeeck East - Turbines.pdf** (851 KB)  **BID - Riebeeck East - Solar.pdf** (986 KB)
 **Surrounding Land Owners.pdf** (132 KB)



To all surrounding landowners

Please find attached a copy of the inception notification for the Environmental Impact Assessment process for proposed Wind and Solar energy projects in the Riebeeck East area, Eastern Cape.

The proposed projects include 77 wind turbines as well as 4 separate solar farms. Attached are two Background Information Documents (BID) that provide further information including maps showing the proposed project areas.

If you have any comments or questions, please do not hesitate to contact me.

Regards

Justin Green
Junior Environmental Consultant



Coastal & Environmental Services
67 African Street, Grahamstown, 6139
P.O. Box 224, Grahamstown, 6140

From: Justin Green <j.green@cesnet.co.za>
To: 'angus@kwandwe.co.za'; 'barryp@isat.co.za'; 'brianncathy@mweb.co.za'; 'pohlands@imaginetc.co.za'; 'mvonhasseln@gmail.com'; 'grant@aptrac.com'; 'lee@rockdale.co.za'; 'fim.dbn@vodamail.co.za'; 'anele.kwayimani@webmail.co.za'; 'mandisa.mondi@transnet.net'; 'MBristow@randgoldresources.com'; 'palmer@itsnet.co.za'; 'p.rose@ru.ac.za'; 'gro@cybertrade.co.za'; 'pearse@pehotels.co.za'; 'thinus@hellsport.co.za'
Cc:
Subject: Release of Terra Power Solutions Draft Scoping Reports for Public Review and Comment



Message  Release of DSR - Surrounding Landowners.pdf (239 KB)

Dear Surrounding Landowners

TERRA POWER SOLUTIONS WIND AND SOLAR ENERGY PROJECTS: RELEASE OF DRAFT SCOPING REPORT FOR PUBLIC REVIEW AND COMMENT

Please be advised the draft Scoping Report for this project has been released and is available for public review until the **3rd of November 2012**. A hard copy of the report can be viewed at the Grahamstown Public Library. The report is also available for download from the CES website: <http://www.cesnet.co.za/public-documents.html>

There will be a public meeting on the 25th of September 2012 at the Highlander in Grahamstown starting at 6pm. There will be a 20 to 30 minute presentation, followed by an opportunity to ask questions, comment, or raise concerns.

Please find attached a full release notification letter.

Feel free to contact me if there are any queries, and please submit comments to myself.

Yours sincerely,

Justin Green
Junior Environmental Consultant

APPENDIX B – Basic Information Document (BID)

BACKGROUND INFORMATION DOCUMENT & INVITATION TO COMMENT:
Construction of a 75 MW Photovoltaic Energy Generating Facility in the
region of Riebeeck East, Eastern Cape Province

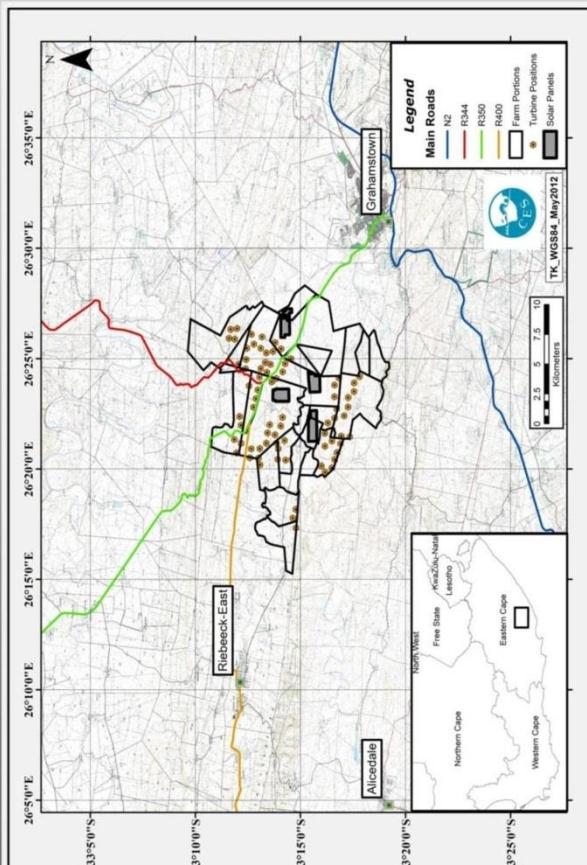
AIM OF THIS DOCUMENT	PROJECT DESCRIPTION
<p>The aim of this Background Information Document is to provide stakeholders with information about this project, the process being followed and to provide them with an opportunity to be involved in the forthcoming environmental assessment process by registering as an Interested and Affected Party (IAP).</p> <p>IAPs are encouraged to raise issues or concerns relevant to the project for consideration in the Scoping Report process that is to be conducted in order to secure the required environmental authorisation.</p> <p>The final Scoping Report will be submitted to the National Department of Environmental Affairs (Pretoria) for decision making.</p> <p>To register as an IAP please send your name and contact details to:</p> <p>Mr Justin Green P.O. Box 934 Grahamstown, 6140 Tel: (046) 622 2364 Fax: (046) 622 6564</p> <p>Email: j.green@cesnet.co.za</p> <p>OR</p> <p>Mr. Jadon Schmidt</p> <p>Email: j.schmidt@cesnet.co.za</p> <p>Your involvement in this process is critical, and will help ensure that all relevant issues are raised and assessed in the Basic Assessment process</p> 	<p>Terra Power Solutions (Pty) Ltd proposes to develop a photovoltaic (PV – or solar panel) electricity generating facility for the production of ±75 MW of energy on four portions of land in the Riebeeck East Region. The site will include Brack Kloof (120 hectares), Table Hill (120 hectares), Watt Hill (132 hectares) and Hilton (150 hectares)</p> <p>The proposed sites are located near Riebeeck East; Makana Municipality in the Eastern Cape Province of South Africa (refer to Figures 1 and 2 below).</p> <p>Coastal and Environmental Services (CES) has been appointed by the applicant to conduct the environmental assessment process.</p> 

Figure 1: Project area overview

RELEVANT LEGISLATION

The proposed project requires a Scoping Report to be undertaken in terms of the 2010 EIA Regulations (GNR 543 of 18 June 2010) as the proposed project triggers activities listed in GNR 545, not limited to those as shown in the table below. As a result the applicant is required to undertake a Full Scoping Report as well as an Environmental Impact Assessment (EIA) process.

GNR 544	(10). The construction of facilities or infrastructure for the transmission and distribution of electricity- <ul style="list-style-type: none"> (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts. (11). The construction of: <ul style="list-style-type: none"> (i) canals; (ii) channels; (iii) bridges; (iv) bulk storm water outlet structures; where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line
GNR 545	(1). The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more (11). Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more;
GNR 546	(4). The construction of road wider than 4 metres with a reserve less than 13.5 metres. (12). The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation (14). The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation. (19). The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre

POTENTIAL IMPACTS

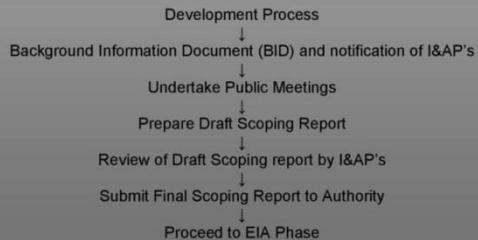
A number of potential issues will be assessed during the scoping process and these are:

- Loss of indigenous vegetation and habitat for fauna
- Impact on indigenous fauna (e.g. red data species)
- Visual impacts on local game reserves and lodges
- It is not anticipated that any features of heritage or cultural significance are present in the project area

APPROACH TO THE SCOPING PHASE

The Scoping Phase is important for informing the public and relevant authorities about the nature and size of the proposed project. A critical component of the Scoping Phase is the Public Participation Process, in which Interested and Affected Parties (I&APs) are given an opportunity to raise any issues or concerns they may have about the project. The process is outlined in the figure below. The Draft Scoping Report will be made available for review by the public and all registered I&APs will be notified to the availability thereof. This report will set the scope and specialist terms of reference for the EIA Phase.

The Scoping Process



HOW CAN YOU BE INVOLVED?

A Public Participation Process (PPP) is being conducted as part of the Scoping Process. The aim of the PPP is to allow everyone who is interested in, or likely to be affected by, the proposed development to provide input into the process.

The Public Participation Process will include:

- Advertisements in local newspapers;
- Notice Boards on site and an electronic notice will be placed at the CDC;
- Circulation of the BID (this document) to all IAPs identified;
- Draft BAR comment period and public meeting in the Coega area; and

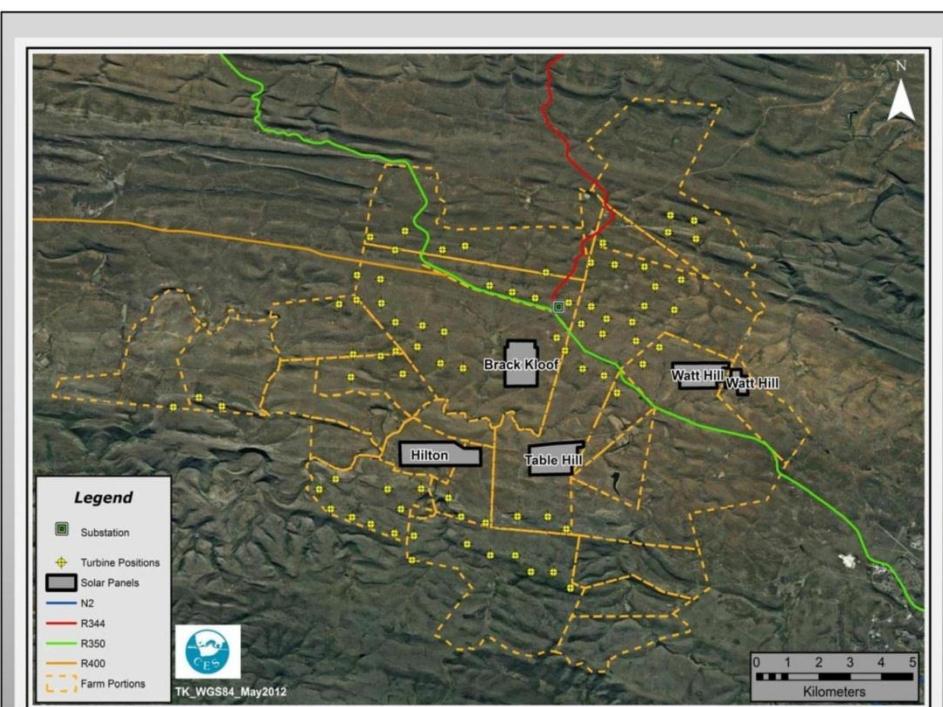


Figure 2: Proposed solar project sites – Brack Kloof, Hilton, Table Hill and Watt Hill



Figure 3: A PV solar panel array similar to that proposed for the project

I wish to confirm being notified for this process and to be registered as an Interested and Affected Party (IAP) for the Terra Power Riebeek East Photo Voltaic Facility EIA process

Name: _____

Organization: _____

Postal address: _____

Email: _____

Phone #: _____ Fax #: _____

My initial comments, issues or concerns are:

Other potential IAPs for the project may be:

Name: _____

Organization: _____

Postal address: _____

Email:

Phone #: _____ Fax #: _____

Please return details to: Mr Justin Green: P.O. Box 934, Grahamstown, 6140

Telephone: (046) 622 2364 Fax: (046) 622 6564 Email: j.green@cesnet.co.za

APPENDIX F: SPECIES LIST OF POTENTIAL SPECIES OF SPECIAL CONCERN THAT COULD POSSIBLY OCCUR AT THE STUDY SITE (SIBIS, 2012)

Genus and Species	IUCN	CITE S	Red Data List	PNCO	NA
<i>Acacia baileyana</i>	NA	NA	NE	NA	NA
<i>Acacia cyclops</i>	NA	NA	NE	NA	NA
<i>Acacia fimbriata</i>	NA	NA	NE	NA	NA
<i>Acacia karroo</i>	NA	NA	NE	NA	NA
<i>Acacia longifolia</i>	NA	NA	NE	NA	NA
<i>Acacia mearnsii</i>	NA	NA	NE	NA	NA
<i>Acacia saligna</i>	NA	NA	NE	NA	NA
<i>Acanthospermum glabratum</i>	NA	NA	NE	NA	NA
<i>Achyranthes aspera</i> var. <i>aspera</i>	NA	NA	NE	NA	NA
<i>Achyranthes aspera</i> var. <i>sicula</i>	NA	NA	NE	NA	NA
<i>Acokanthera oppositifolia</i>	NA	NA	LC	Schedule 4	NA
<i>Acrolophia capensis</i>	NA	II	LC	NA	NA
<i>Acrolophia cochlearis</i>	NA	II	LC	NA	NA
<i>Adenium multiflorum</i>	NA	NA	LC	Schedule 4	NA
<i>Agathosma bicornuta</i>	NA	NA	EN	NA	NA
<i>Agathosma</i> sp.	NA	NA	Critically rare	NA	NA
<i>Aloe micracantha</i>	NA	NA	NT	NA	NA
<i>Aloe striata</i> subsp. <i>karasbergensis</i>	NA	NA	VU	NA	NA
<i>Alsophila capensis</i>	NA	NA	Declining	NA	NA
<i>Alternanthera pungens</i>	NA	NA	NE	NA	NA
<i>Amaranthus hybridus</i> subsp. <i>hybridus</i> var. <i>hybridus</i>	NA	NA	NE	NA	NA
<i>Ammocharis coranica</i>	NA	NA	LC	Schedule 4	NA
<i>Anacamptos filamentos</i> subsp. <i>filamentos</i>	NA	II	LC	Schedule 4	NA
<i>Anagallis arvensis</i> subsp. <i>arvensis</i>	NA	NA	NE	NA	NA
<i>Anisotoma cordifolia</i>	NA	NA	LC	Schedule 4	NA
<i>Apium graveolens</i>	NA	NA	NE	NA	NA
<i>Apodolirion macowanii</i>	NA	NA	VU	Schedule 4	NA
<i>Aptenia cordifolia</i>	NA	NA	LC	Schedule 4	NA
<i>Aptenia cordifolia</i>	NA	NA	LC	NA	NA
<i>Aptenia haekeliana</i>	NA	NA	LC	Schedule 4	NA
<i>Aptenia haekeliana</i>	NA	NA	LC	NA	NA
<i>Argemone ochroleuca</i> subsp. <i>ochroleuca</i>	NA	NA	NE	NA	NA
<i>Argyrolobium trifoliatum</i>	NA	NA	Threatened	NA	NA
<i>Aristea abyssinica</i>	NA	NA	LC	Schedule 4	NA
<i>Aristea abyssinica</i>	NA	NA	LC	NA	NA
<i>Aristea anceps</i>	NA	NA	LC	Schedule 4	NA
<i>Aristea anceps</i>	NA	NA	LC	NA	NA
<i>Aristea dichotoma</i>	NA	NA	LC	Schedule 4	NA
<i>Aristea dichotoma</i>	NA	NA	LC	NA	NA
<i>Aristea pusilla</i>	NA	NA	LC	Schedule 4	NA

<i>Aristea pusilla</i>	NA	NA	LC	NA	NA
<i>Arundo donax</i>	NA	NA	NE	NA	NA
<i>Asclepias albens</i>	NA	NA	LC	Schedule 4	NA
<i>Asclepias crispa</i> var. <i>crispa</i>	NA	NA	LC	Schedule 4	NA
<i>Asclepias dregeana</i> var. <i>dregeana</i>	NA	NA	NA	Schedule 4	NA
<i>Asclepias expansa</i>	NA	NA	LC	Schedule 4	NA
<i>Aspalathus argyrophanes</i>	NA	NA	Rare	NA	NA
<i>Aspalathus gerrardii</i>	NA	NA	VU	NA	NA
<i>Asparagus stipulaceus</i>	NA	NA	NT	NA	NA
<i>Aspidoglossum carinatum</i>	NA	NA	LC	Schedule 4	NA
<i>Aspidonepsis diploglossa</i>	NA	NA	NA	Schedule 4	NA
<i>Aster squamatus</i>	NA	NA	NE	NA	NA
<i>Atriplex lindleyi</i> subsp. <i>inflata</i>	NA	NA	NE	NA	NA
<i>Atriplex littoralis</i>	NA	NA	NE	NA	NA
<i>Bidens pilosa</i>	NA	NA	NE	NA	NA
<i>Bobartia gracilis</i>	NA	NA	LC	Schedule 4	NA
<i>Bobartia gracilis</i>	NA	NA	LC	NA	NA
<i>Bobartia orientalis</i> subsp. <i>orientalis</i>	NA	NA	Rare	Schedule 4	NA
<i>Bobartia orientalis</i> subsp. <i>orientalis</i>	NA	NA	Rare	NA	NA
<i>Bonatea speciosa</i> var. <i>antennifera</i>	NA	II	LC	NA	NA
<i>Bonatea speciosa</i> var. <i>antennifera</i>	NA	II	LC	NA	NA
<i>Boophone disticha</i>	NA	NA	Declining	Schedule 4	NA
<i>Brachycorythis macowaniana</i>	NA	II	LC	NA	NA
<i>Brachycorythis macowaniana</i>	NA	II	LC	NA	NA
<i>Brachystelma comptum</i>	NA	NA	VU	Schedule 4	NA
<i>Brachystelma macropetalum</i>	NA	NA	LC	Schedule 4	NA
<i>Brachystelma minimum</i>	NA	NA	Rare	Schedule 4	NA
<i>Brachystelma rubellum</i>	NA	NA	LC	Schedule 4	NA
<i>Brachystelma schizoglossoides</i>	NA	NA	LC	Schedule 4	NA
<i>Briza maxima</i>	NA	NA	NE	NA	NA
<i>Briza minor</i>	NA	NA	NE	NA	NA
<i>Bromus catharticus</i>	NA	NA	NE	NA	NA
<i>Brownleea coerulea</i>	NA	II	LC	NA	NA
<i>Brownleea coerulea</i>	NA	II	LC	NA	NA
<i>Brownleea parviflora</i>	NA	II	LC	NA	NA
<i>Brownleea parviflora</i>	NA	II	LC	NA	NA
<i>Brunsvigia grandiflora</i>	NA	NA	LC	Schedule 4	NA
<i>Brunsvigia gregaria</i>	NA	NA	LC	Schedule 4	NA
<i>Callistemon rigidus</i>	NA	NA	NE	NA	NA
<i>Calopsis paniculata</i>	NA	NA	NE	NA	NA
<i>Capsella bursa-pastoris</i>	NA	NA	NE	NA	NA
<i>Carissa bispinosa</i>	NA	NA	LC	Schedule 4	NA
<i>Carpobrotus edulis</i> subsp. <i>edulis</i>	NA	NA	LC	Schedule 4	NA
<i>Carpobrotus edulis</i> subsp. <i>edulis</i>	NA	NA	LC	NA	NA
<i>Cassytha filiformis</i>	NA	NA	NE	NA	NA
<i>Centaurea cyanus</i>	NA	NA	NE	NA	NA

Centaurea melitensis	NA	NA	NE	NA	NA
Ceratandra grandiflora	NA	II	LC	NA	NA
Ceratandra grandiflora	NA	II	LC	NA	NA
Ceropegia ampliata var. ampliata	NA	NA	LC	Schedule 4	NA
Ceropegia bowkeri subsp. sororia	NA	NA	LC	Schedule 4	NA
Ceropegia carnosa	NA	NA	LC	Schedule 4	NA
Ceropegia stapeliiformis subsp. stapeliiformis	NA	NA	LC	Schedule 4	NA
Chasmanthe aethiopica	NA	NA	LC	Schedule 4	NA
Chasmanthe aethiopica	NA	NA	LC	NA	NA
Chenopodium carinatum	NA	NA	NE	NA	NA
Chenopodium glaucum	NA	NA	NE	NA	NA
Chenopodium murale var. murale	NA	NA	NE	NA	NA
Chenopodium pumilio	NA	NA	NE	NA	NA
Chenopodium schraderianum	NA	NA	NE	NA	NA
Cirsium vulgare	NA	NA	NE	NA	NA
Clivia nobilis	NA	NA	VU	Schedule 4	NA
Conyza bonariensis	NA	NA	NE	NA	NA
Coronopus didymus	NA	NA	NE	NA	NA
Corpuscularia taylori	NA	NA	LC	Schedule 4	NA
Corpuscularia taylori	NA	NA	LC	NA	NA
Cotyledon adscendens	NA	NA	EN	NA	NA
Crassula perfoliata var. coccinea	NA	NA	LC	Schedule 4	NA
Crassula perfoliata var. minor	NA	NA	LC	Schedule 4	NA
Crassula rupestris subsp. commutata	NA	NA	Rare	NA	NA
Crassula vaillantii	NA	NA	NE	NA	NA
Crinum campanulatum	VU	NA	NT	Schedule 4	NA
Crinum macowanii	NA	NA	Declining	Schedule 4	NA
Crinum macowanii subsp. confusum	NA	NA	Declining	Schedule 4	NA
Curtisia dentata	NA	NA	NT	NA	NA
Cuscuta campestris	NA	NA	NE	NA	NA
Cyathea capensis var. capensis	NA	II	NA	NA	Protected Tree List
Cymbopogon pospischilii	NA	NA	NE	NA	NA
Cynanchum ellipticum	NA	NA	LC	Schedule 4	NA
Cyrtanthus clavatus	NA	NA	DDT	Schedule 4	NA
Cyrtanthus obliquus	NA	NA	Declining	Schedule 4	NA
Cyrtanthus parviflorus	NA	NA	NA	Schedule 4	NA
Cyrtanthus smithiae	NA	NA	LC	Schedule 4	NA
Cyrtanthus sp.	NA	NA	NA	Schedule 4	NA
Cyrtorchis arcuata subsp. arcuata	NA	II	LC	NA	NA
Cyrtorchis arcuata subsp. arcuata	NA	II	LC	NA	NA
Datura stramonium	NA	NA	NE	NA	NA
Delosperma affine	NA	NA	LC	Schedule 4	NA
Delosperma affine	NA	NA	LC	NA	NA
Delosperma cooperi	NA	NA	LC	Schedule 4	NA
Delosperma cooperi	NA	NA	LC	NA	NA
Delosperma ecklonis	NA	NA	LC	Schedule 4	NA

<i>Delosperma ecklonis</i>	NA	NA	LC	NA	NA
<i>Delosperma frutescens</i>	NA	NA	LC	Schedule 4	NA
<i>Delosperma frutescens</i>	NA	NA	LC	NA	NA
<i>Delosperma hollandii</i>	NA	NA	LC	Schedule 4	NA
<i>Delosperma hollandii</i>	NA	NA	LC	NA	NA
<i>Delosperma multiflorum</i>	NA	NA	LC	Schedule 4	NA
<i>Delosperma multiflorum</i>	NA	NA	LC	NA	NA
<i>Delosperma sp.</i>	NA	NA	NA	Schedule 4	NA
<i>Diascia cuneata</i>	NA	NA	LC	Schedule 4	NA
<i>Diascia sp.</i>	NA	NA	NA	Schedule 4	NA
<i>Dicerothamnus rhinocerotis</i>	NA	NA	NE	NA	NA
<i>Dites iridioides</i>	NA	NA	LC	Schedule 4	NA
<i>Dites iridioides</i>	NA	NA	LC	NA	NA
<i>Digitaria sanguinalis</i>	NA	NA	NE	NA	NA
<i>Dioscorea elephantipes</i>	NA	NA	Declining	NA	NA
<i>Dioscorea sylvatica</i> var. <i>sylvatica</i>	NA	NA	NE	NA	NA
<i>Disa bracteata</i>	NA	II	LC	NA	NA
<i>Disa bracteata</i>	NA	II	LC	NA	NA
<i>Disa brevicornis</i>	NA	II	LC	NA	NA
<i>Disa brevicornis</i>	NA	II	LC	NA	NA
<i>Disa caulescens</i>	NA	II	LC	NA	NA
<i>Disa caulescens</i>	NA	II	LC	NA	NA
<i>Disa lugens</i> var. <i>lugens</i>	NA	II	EN	NA	NA
<i>Disa lugens</i> var. <i>lugens</i>	NA	II	EN	NA	NA
<i>Disa patula</i> var. <i>patula</i>	NA	II	LC	NA	NA
<i>Disa patula</i> var. <i>patula</i>	NA	II	LC	NA	NA
<i>Disa polygonoides</i>	NA	II	LC	NA	NA
<i>Disa polygonoides</i>	NA	II	LC	NA	NA
<i>Disa porrecta</i>	NA	II	LC	NA	NA
<i>Disa porrecta</i>	NA	II	LC	NA	NA
<i>Disa racemosa</i>	NA	II	LC	NA	NA
<i>Disa racemosa</i>	NA	II	LC	NA	NA
<i>Disa sagittalis</i>	NA	II	LC	NA	NA
<i>Disa sagittalis</i>	NA	II	LC	NA	NA
<i>Disperis capensis</i> var. <i>capensis</i>	NA	II	LC	NA	NA
<i>Disperis capensis</i> var. <i>capensis</i>	NA	II	LC	NA	NA
<i>Disperis lindleyana</i>	NA	II	LC	NA	NA
<i>Disperis lindleyana</i>	NA	II	LC	NA	NA
<i>Drimia altissima</i>	NA	NA	Declining	NA	NA
<i>Drosanthemum fourcadei</i>	NA	NA	LC	Schedule 4	NA
<i>Drosanthemum fourcadei</i>	NA	NA	LC	NA	NA
<i>Drosanthemum hispidum</i>	NA	NA	LC	Schedule 4	NA
<i>Drosanthemum hispidum</i>	NA	NA	LC	NA	NA
<i>Drosanthemum lique</i>	NA	NA	LC	Schedule 4	NA
<i>Drosanthemum lique</i>	NA	NA	LC	NA	NA
<i>Drosanthemum sp.</i>	NA	NA	NA	Schedule 4	NA

<i>Einadia nutans</i> subsp. <i>nutans</i>	NA	NA	NE	NA	NA
<i>Elaeodendron croceum</i>	NA	NA	Declining	NA	NA
<i>Encephalartos caffer</i>	NT	II	NT	Schedule 3	NA
<i>Encephalartos latifrons</i>	CR	II	CR	Schedule 3	NA
<i>Encephalartos longifolius</i>	NT	II	NT	Schedule 3	NA
<i>Encephalartos trispinosus</i>	VU	II	VU	Schedule 3	NA
<i>Erica caffra</i> var. <i>auricularis</i>	NA	NA	NA	Schedule 4	NA
<i>Erica caffra</i> var. <i>caffra</i>	NA	NA	LC	Schedule 4	NA
<i>Erica cerinthoides</i> var. <i>barbertona</i>	NA	NA	LC	Schedule 4	NA
<i>Erica cerinthoides</i> var. <i>cerinthoides</i>	NA	NA	LC	Schedule 4	NA
<i>Erica chamissonis</i> var. <i>chamissonis</i>	NA	NA	LC	Schedule 4	NA
<i>Erica chamissonis</i> var. <i>polyantha</i>	NA	NA	LC	Schedule 4	NA
<i>Erica curviflora</i> var. <i>curviflora</i>	NA	NA	NE	Schedule 4	NA
<i>Erica cyathiformis</i> var. <i>cyathiformis</i>	NA	NA	LC	Schedule 4	NA
<i>Erica demissa</i> var. <i>demissa</i>	NA	NA	LC	Schedule 4	NA
<i>Erica glumiflora</i>	NA	NA	LC	Schedule 4	NA
<i>Erica harveyana</i>	NA	NA	LC	Schedule 4	NA
<i>Erica hispidula</i> var. <i>hispidula</i>	NA	NA	LC	Schedule 4	NA
<i>Erica nemorosa</i>	NA	NA	LC	Schedule 4	NA
<i>Erica pectinifolia</i> var. <i>pectinifolia</i>	NA	NA	LC	Schedule 4	NA
<i>Erica scabriuscula</i>	NA	NA	LC	Schedule 4	NA
<i>Erica sparsa</i> var. <i>sparsa</i>	NA	NA	LC	Schedule 4	NA
<i>Erica subdivaricata</i>	NA	NA	LC	Schedule 4	NA
<i>Erica varderi</i>	NA	NA	DDT	Schedule 4	NA
<i>Erodium cicutarium</i>	NA	NA	NE	NA	NA
<i>Erodium moschatum</i>	NA	NA	NE	NA	NA
<i>Eucomis comosa</i> var. <i>comosa</i>	NA	NA	NE	NA	NA
<i>Eugenia zeyheri</i>	DD	NA	LC	NA	NA
<i>Eulophia aculeata</i> subsp. <i>aculeata</i>	NA	II	LC	NA	NA
<i>Eulophia aculeata</i> subsp. <i>aculeata</i>	NA	II	LC	NA	NA
<i>Eulophia ensata</i>	NA	II	LC	NA	NA
<i>Eulophia ensata</i>	NA	II	LC	NA	NA
<i>Eulophia foliosa</i>	NA	II	LC	NA	NA
<i>Eulophia foliosa</i>	NA	II	LC	NA	NA
<i>Eulophia hians</i> var. <i>hians</i>	NA	II	LC	NA	NA
<i>Eulophia hians</i> var. <i>hians</i>	NA	II	LC	NA	NA
<i>Eulophia macowanii</i>	NA	II	LC	NA	NA
<i>Eulophia macowanii</i>	NA	II	LC	NA	NA
<i>Eulophia parviflora</i>	NA	II	LC	NA	NA
<i>Eulophia parviflora</i>	NA	II	LC	NA	NA
<i>Eulophia streptopetala</i>	NA	II	LC	NA	NA
<i>Eulophia streptopetala</i>	NA	II	LC	NA	NA
<i>Eulophia tuberculata</i>	NA	II	LC	NA	NA
<i>Eulophia tuberculata</i>	NA	II	LC	NA	NA
<i>Eulophia zeyheri</i>	NA	II	LC	NA	NA
<i>Eulophia zeyheri</i>	NA	II	LC	NA	NA

<i>Euphorbia bubalina</i>	NA	II	LC	NA	NA
<i>Euphorbia bupleurifolia</i>	NA	II	Declining	Schedule 4	NA
<i>Euphorbia caerulescens</i>	NA	II	LC	NA	NA
<i>Euphorbia esculenta</i>	NA	II	LC	NA	NA
<i>Euphorbia fimbriata</i>	NA	II	LC	NA	NA
<i>Euphorbia flanaganii</i>	NA	II	LC	NA	NA
<i>Euphorbia grandialata</i>	NA	II	Rare	NA	NA
<i>Euphorbia inconstantia</i>	NA	II	LC	NA	NA
<i>Euphorbia inermis</i> var. <i>inermis</i>	NA	II	LC	NA	NA
<i>Euphorbia mauritanica</i> var. <i>corallothamnus</i>	NA	II	NA	NA	NA
<i>Euphorbia mauritanica</i> var. <i>mauritanica</i>	NA	II	LC	NA	NA
<i>Euphorbia meloformis</i> subsp. <i>meloformis</i> <i>forma falsa</i>	NA	II	NE	Schedule 4	NA
<i>Euphorbia micracantha</i>	NA	II	LC	NA	NA
<i>Euphorbia obesa</i> subsp. <i>Obesa</i>	NA	II	EN	Schedule 4	NA
<i>Euphorbia ornithopus</i>	NA	II	LC	NA	NA
<i>Euphorbia pentagona</i>	NA	II	LC	NA	NA
<i>Euphorbia polygona</i>	NA	II	LC	NA	NA
<i>Euphorbia pugniformis</i>	NA	II	LC	NA	NA
<i>Euphorbia rectirama</i>	NA	II	LC	NA	NA
<i>Euphorbia rhombifolia</i>	NA	II	LC	NA	NA
<i>Euphorbia serrata</i>	NA	NA	NE	NA	NA
<i>Euphorbia silenifolia</i>	NA	II	LC	NA	NA
<i>Euphorbia stellata</i>	NA	II	LC	NA	NA
<i>Euphorbia tetragona</i>	NA	II	LC	NA	NA
<i>Euphorbia triangularis</i>	NA	II	LC	NA	NA
<i>Fallopia convolvulus</i>	NA	NA	NE	NA	NA
<i>Faucaria felina</i>	NA	NA	LC	Schedule 4	NA
<i>Faucaria felina</i>	NA	NA	LC	NA	NA
<i>Ficinia</i> sp.	NA	NA	Rare	NA	NA
<i>Fockea capensis</i>	NA	NA	LC	Schedule 4	NA
<i>Freesia corymbosa</i>	NA	NA	LC	Schedule 4	NA
<i>Freesia corymbosa</i>	NA	NA	LC	NA	NA
<i>Galinsoga parviflora</i>	NA	NA	NE	NA	NA
<i>Gladiolus huttonii</i>	NA	NA	VU	Schedule 4	NA
<i>Gladiolus huttonii</i>	NA	NA	VU	NA	NA
<i>Gladiolus mortonius</i>	NA	NA	LC	Schedule 4	NA
<i>Gladiolus mortonius</i>	NA	NA	LC	NA	NA
<i>Gladiolus ochroleucus</i>	NA	NA	LC	Schedule 4	NA
<i>Gladiolus ochroleucus</i>	NA	NA	LC	NA	NA
<i>Gladiolus permeabilis</i> subsp. <i>edulis</i>	NA	NA	LC	Schedule 4	NA
<i>Gladiolus permeabilis</i> subsp. <i>edulis</i>	NA	NA	LC	NA	NA
<i>Gladiolus permeabilis</i> subsp. <i>permeabilis</i>	NA	NA	LC	Schedule 4	NA
<i>Gladiolus permeabilis</i> subsp. <i>permeabilis</i>	NA	NA	LC	NA	NA
<i>Gladiolus</i> sp.	NA	NA	NA	Schedule 4	NA
<i>Gladiolus wilsonii</i>	NA	NA	LC	Schedule 4	NA
<i>Gladiolus wilsonii</i>	NA	NA	LC	NA	NA

<i>Glottiphyllum longum</i>	NA	NA	LC	Schedule 4	NA
<i>Glottiphyllum longum</i>	NA	NA	LC	NA	NA
<i>Glottiphyllum</i> sp.	NA	NA	NA	Schedule 4	NA
<i>Gnaphalium declinatum</i>	NA	NA	NT	NA	NA
<i>Gomphocarpus cancellatus</i>	NA	NA	LC	Schedule 4	NA
<i>Gomphocarpus physocarpus</i>	NA	NA	LC	Schedule 4	NA
<i>Gunnera perpensa</i>	NA	NA	Declining	NA	NA
<i>Habenaria arenaria</i>	NA	II	LC	NA	NA
<i>Habenaria arenaria</i>	NA	II	LC	NA	NA
<i>Habenaria dregeana</i>	NA	II	LC	NA	NA
<i>Habenaria dregeana</i>	NA	II	LC	NA	NA
<i>Habenaria falcicornis</i> subsp. <i>falcicornis</i>	NA	II	LC	NA	NA
<i>Habenaria falcicornis</i> subsp. <i>falcicornis</i>	NA	II	LC	NA	NA
<i>Haemanthus albiflos</i>	NA	NA	LC	Schedule 4	NA
<i>Haemanthus coccineus</i>	NA	NA	LC	Schedule 4	NA
<i>Hakea drupacea</i>	NA	NA	NE	NA	NA
<i>Hakea drupacea</i>	NA	NA	NE	NA	NA
<i>Hakea sericea</i>	NA	NA	NE	NA	NA
<i>Hakea sericea</i>	NA	NA	NE	NA	NA
<i>Halleria lucida</i>	NA	NA	LC	Schedule 4	NA
<i>Haworthia altilinea</i>	NA	NA	NE	NA	NA
<i>Haworthia angustifolia</i> var. <i>angustifolia</i>	NA	NA	DDT	NA	NA
<i>Haworthia coarctata</i> var. <i>adelaidensis</i>	NA	NA	DDT	NA	NA
<i>Haworthia cymbiformis</i> var. <i>incurvula</i>	NA	NA	DDT	NA	NA
<i>Helichrysum foetidum</i> var. <i>foetidum</i>	NA	NA	NE	NA	NA
<i>Helichrysum odoratissimum</i> var. <i>odoratissimum</i>	NA	NA	NE	NA	NA
<i>Heliotropium curassavicum</i>	NA	NA	NE	NA	NA
<i>Hesperantha candida</i>	NA	NA	LC	Schedule 4	NA
<i>Hesperantha candida</i>	NA	NA	LC	NA	NA
<i>Hesperantha radiata</i>	NA	NA	LC	Schedule 4	NA
<i>Hesperantha radiata</i>	NA	NA	LC	NA	NA
<i>Holothrix brevipetala</i>	NA	II	LC	NA	NA
<i>Holothrix brevipetala</i>	NA	II	LC	NA	NA
<i>Holothrix burchellii</i>	NA	II	LC	NA	NA
<i>Holothrix burchellii</i>	NA	II	LC	NA	NA
<i>Holothrix cernua</i>	NA	II	LC	NA	NA
<i>Holothrix cernua</i>	NA	II	LC	NA	NA
<i>Holothrix exilis</i>	NA	II	LC	NA	NA
<i>Holothrix exilis</i>	NA	II	LC	NA	NA
<i>Holothrix macowaniana</i>	NA	II	DDD	NA	NA
<i>Holothrix macowaniana</i>	NA	II	DDD	NA	NA
<i>Holothrix parviflora</i>	NA	II	LC	NA	NA
<i>Holothrix parviflora</i>	NA	II	LC	NA	NA
<i>Huernia thuretii</i> var. <i>thuretii</i>	NA	NA	NE	Schedule 4	NA
<i>Hypochaeris glabra</i>	NA	NA	NE	NA	NA
<i>Hypochaeris microcephala</i> var. <i>albiflora</i>	NA	NA	NE	NA	NA