



## **Pembroke – Poseidon 400 KV - Avifauna Walkdown**

### **Buffalo City, Amathole and Cacadu District Municipalities, Eastern Cape Province, South Africa**

18/05/2025

**Prepared by:**




**The Biodiversity Company**

Cell: +27 81 319 1225

[info@thebiodiversitycompany.com](mailto:info@thebiodiversitycompany.com)

[www.thebiodiversitycompany.com](http://www.thebiodiversitycompany.com)



<b>Report Name</b>	<b>Pembroke – Poseidon 400 KV - Avifauna Walkdown</b>	
<b>Specialist Theme</b>	Avifauna Theme - walkdown	
<b>Project Reference</b>	Pembroke - Poseidon	
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<b>Environmental Assessment Practitioner</b>		
<b>Fieldwork and Report Writer</b>	Dr Ryno Kemp (SACNASP 117462/17)	
<b>Reviewer</b>	Dr Lindi Steyn (SACNASP 119992)	
<b>Declaration</b>	<p>The Biodiversity Company and its associates operate as independent consultants under the auspice of the South African Council for Natural Scientific Professions. We declare that we have no affiliation with or vested financial interests in the proponent, other than for work performed under the Environmental Impact Assessment Regulations, Amended. We have no conflicting interests in the undertaking of this activity and have no interests in secondary developments resulting from the authorisation of this project. We have no vested interest in the project, other than to provide a professional service within the constraints of the project (timing, time and budget) based on the principals of science.</p>	



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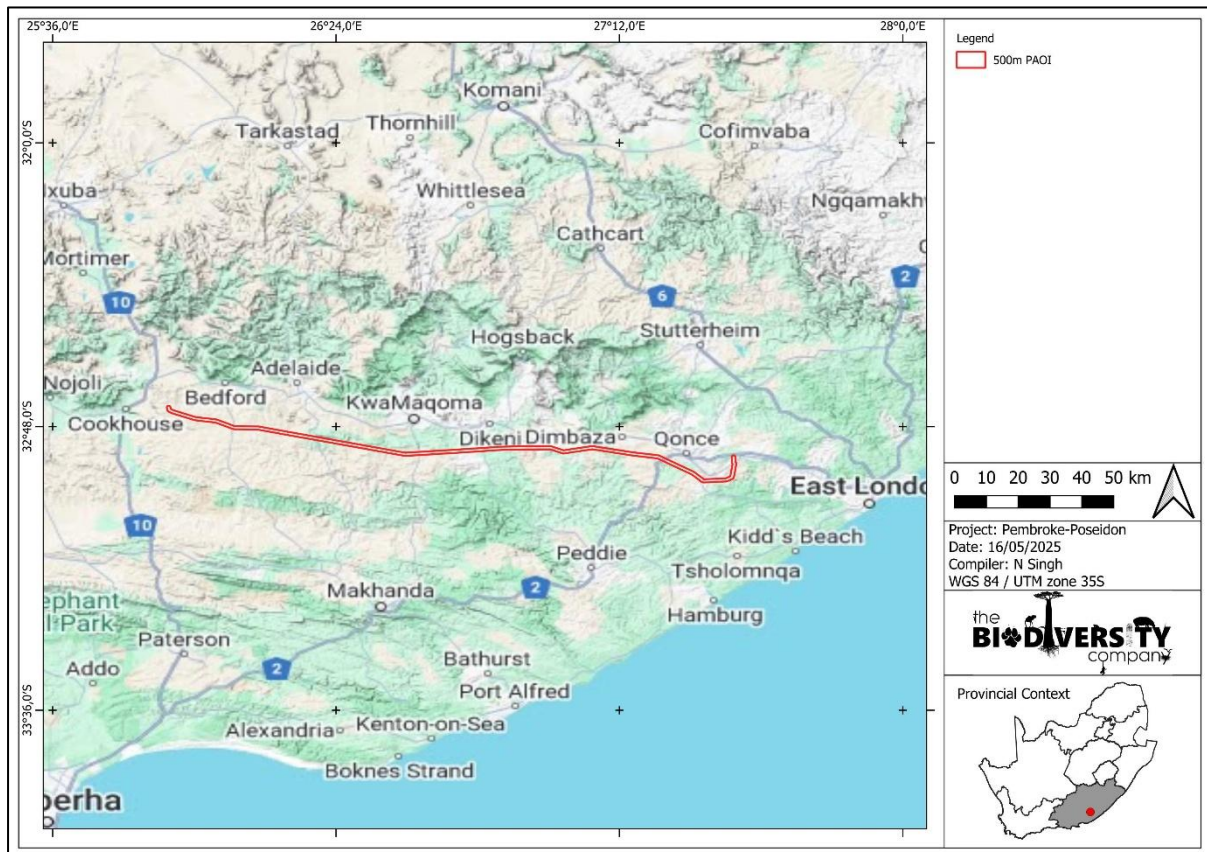
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## 1 Introduction

The Biodiversity Company was commissioned to conduct an avifauna walkdown survey in support of the Environmental Management Programme report (EMPr) for the proposed  $\pm 165$  km 400 kV powerline from Pembroke to the Poseidon Substation as part of the proposed Greater East London Phase 4 Project. The proposed powerline starts near Qonce and ends near Cookhouse, traversing the Buffalo City Metropolitan, Raymond Mhlaba and Blue Crane Route Local Municipalities in the Eastern Cape (Figure 1-1). The walkdown was undertaken from the 7<sup>th</sup> to the 17<sup>th</sup> of April 2024. The survey constituted a late wet season.



**Figure 1-1** The project area of influence

### 1.1 Terms of Reference

The Terms of Reference (ToR) for this assessment include the following:

- Review of existing information related to the development;
- Conduct an avifauna walkdown for the planned footprint areas;
- Compilation of a report detailing the results of the walkdown:
  1. Detail any ecological constraints identified for the planned infrastructure;
  2. Present information on the presence of any Species of Conservation Concern (SCC); and

3. Provide information and recommendations for the micro-siting of relevant infrastructure.
- Provide information to adequately inform any contractors, environmental officers and personnel pertaining to the ecological significance of the area; and
  - Provide recommendations for suitable mitigation measures, in particular the identification of:
    1. Towers that may require relocation, based on the identification of a significant avifaunal sensitivity and the assessment of the newly proposed site for relocation (if required);
    2. Spans of power line that require the installation of bird flight diverters to mitigate the collision impact;
    3. Towers that require the installation of bird guards, particularly those areas of high avifaunal utilisation (i.e. roosting and nesting activities on the towers) where faecal pollution and streamers could compromise the quality of the supply; and
    4. Nest and roost locations (and their associated sensitivity buffers) where construction activities associated with a new power line could have an impact on breeding populations of Red List species, in particular large raptors and significantly sized Red List species' roosts.

## 1.2 Assumptions and Limitations

The following assumptions and limitations should be noted for the assessment:

- The assessment area was based on the geospatial file provided by the client and any alterations to the development area subsequent to the site visit may affect the results;
- The walk down was completed in the late summer, and as such, may exclude some migratory species;
- Due to access issues associated with impenetrable vegetation or contact information not available, walking to the location of every proposed tower was not possible. Where possible, a drive assessment was conducted instead of alongside the corridor for these sites. As a result, our confidence in our findings was high except in areas where roadside surveys were done, where our confidence was only medium or low; and
- The GPS used in the assessment has an accuracy of 5 m and consequently, any spatial features may be offset by 5 m.

## 2 Approach

### 2.1 Spatial Data

Infrastructure positions were supplied by the client. The findings for the infrastructure are discussed in the subsequent sections.

## 2.2 Ecological Information and Walkdown

The original EIA avifauna assessment for the Poisedon-Pembroke powerline was not available at the time of the walkdown assessment and this report is therefore not referring to the original assessment. If no such assessment has been conducted, this walkdown cannot be considered a Basic Assessment report. The walkdown assessment covered most of the powerline, with small sections not assessed as highlighted in Table 2-3. However, this would not significantly change the outcome of the proposed mitigations. The walkdown included searching for sensitive habitats, nests and any avifauna SCC believed to occur within the area being searched. The proposed layout was evaluated according to the potential impact on the surrounding ecosystems. However, we conducted a desktop analysis to determine the expected species SSC and observed SCC (Table 2-1). A total of 11 of the expected 41 were observed, highlighting the sensitivity of the line.

**Table 2-1**      **Threatened avifauna species that are expected to occur within the PAOI. CR = Critically Endangered, EN = Endangered, LC = Least Concern, NT = Near Threatened and VU = Vulnerable**

Common Name	Scientific Name	Regional	Global	LoO
African Darter	<i>Anhinga rufa</i>	NT	LC	Confirmed
African Finfoot	<i>Podica senegalensis</i>	VU	LC	Low
African Marsh Harrier	<i>Circus ranivorus</i>	VU	LC	Moderate
African Rock Pipit	<i>Anthus crenatus</i>	LC	NT	Low
Baillon's Crake	<i>Zapornia pusilla</i>	NT	LC	Low
Black Harrier	<i>Circus maurus</i>	EN	EN	Moderate
Black Stork	<i>Ciconia nigra</i>	EN	LC	Low
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	NT	LC	Moderate
Black-winged Kite	<i>Elanus caeruleus</i>	NT	LC	Confirmed
Blue Crane	<i>Anthropoides paradiseus</i>	VU	VU	Confirmed
Burchell's Courser	<i>Cursorius rufus</i>	VU	LC	High
Cape Parrot	<i>Poicephalus robustus</i>	VU	VU	High
Cape Shoveler	<i>Spatula smithii</i>	NT	LC	High
Cape Vulture	<i>Gyps coprotheres</i>	VU	VU	High
Crowned Eagle	<i>Stephanoaetus coronatus</i>	VU	NT	Moderate
Curlew Sandpiper	<i>Calidris ferruginea</i>	VU	VU	Low
Denham's Bustard	<i>Neotis denhami</i>	VU	NT	High
Forest Buzzard	<i>Buteo trizonatus</i>	NT	NT	Low
Great Egret	<i>Ardea alba</i>	NT	LC	Low
Grey Crowned Crane	<i>Balearica regulorum</i>	VU	EN	High
Half-collared Kingfisher	<i>Alcedo semitorquata</i>	VU	LC	High
Hamerkop	<i>Scopus umbretta</i>	NT	LC	High
Kittlitz's Plover	<i>Charadrius pecuarius</i>	NT	LC	Moderate
Knysna Woodpecker	<i>Campethera notata</i>	LC	NT	Confirmed
Kori Bustard	<i>Ardeotis kori</i>	NT	NT	Low
Lanner Falcon	<i>Falco biarmicus</i>	NT	LC	Confirmed
Lesser Kestrel	<i>Falco naumanni</i>	VU	LC	Moderate
Ludwig's Bustard	<i>Neotis ludwigii</i>	EN	EN	Confirmed

<b>Martial Eagle</b>	<i>Polemaetus bellicosus</i>	EN	EN	Confirmed
<b>Melodious Lark</b>	<i>Mirafra cheniana</i>	NT	LC	Moderate
<b>Red-billed Teal</b>	<i>Anas erythrorhyncha</i>	NT	LC	Confirmed
<b>Secretarybird</b>	<i>Sagittarius serpentarius</i>	VU	EN	High
<b>Sentinel Rock Thrush</b>	<i>Monticola explorator</i>	LC	NT	Low
<b>Southern Bald Ibis</b>	<i>Geronticus calvus</i>	NT	NT	Low
<b>Southern Black Korhaan</b>	<i>Afrotis afra</i>	VU	VU	High
<b>Southern Ground Hornbill</b>	<i>Bucorvus leadbeateri</i>	EN	VU	Low
<b>Southern Pochard</b>	<i>Netta erythrophthalma</i>	NT	LC	Low
<b>Verreaux's Eagle</b>	<i>Aquila verreauxii</i>	VU	LC	Moderate
<b>White-backed Duck</b>	<i>Thalassornis leuconotus</i>	NT	LC	Low
<b>White-bellied Bustard</b>	<i>Eupodotis senegalensis</i>	VU	LC	Confirmed
<b>Yellow-billed Duck</b>	<i>Anas undulata</i>	NT	LC	Confirmed

\*(Lee *et al.* 2025), + (IUCN 2021)

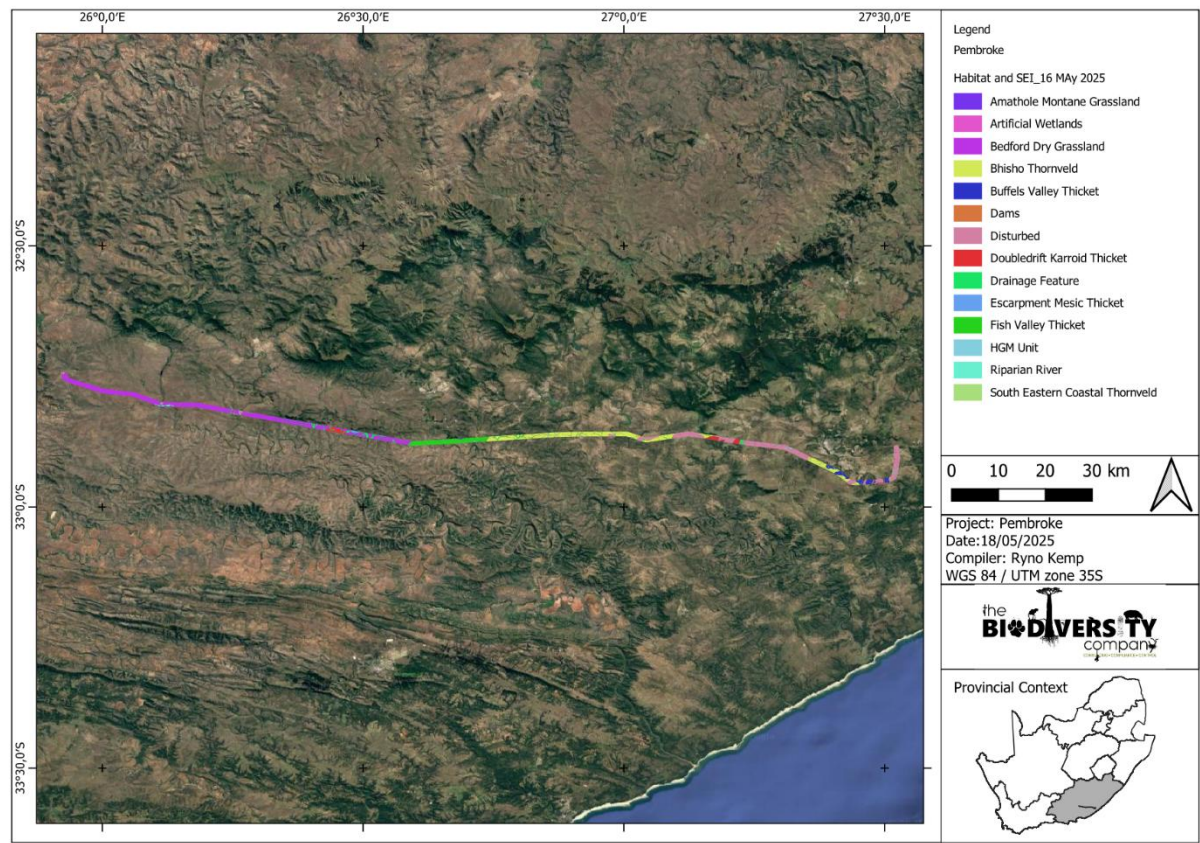
## 2.2.1 Route

The findings of the walkdown are discussed in Table 2-3. The layout is depicted in Figure 1-1. Site sensitivities were allocated based on the Conservation plan status, infield observations of the habitat conditions and possible presence/absence of avifauna, especially the high numbers of SCC observed. This results in the project area being classified as mainly high avifaunal Site Ecological Importance (SEI) as indicated at each pylon in Table 2-3.

**Table 2-2 Guidelines for the sensitivity areas in the context of the proposed development activities.**




Site Ecological Importance	Interpretation in relation to proposed development activities
<b>Very High</b>	Avoidance mitigation – no destructive development activities should be considered. Offset mitigation not acceptable/not possible (i.e., last remaining populations of species, last remaining good condition patches of ecosystems/unique species assemblages). Destructive impacts for species/ecosystems where persistence target remains.
<b>High</b>	Avoidance mitigation wherever possible. Minimisation mitigation – changes to project infrastructure design to limit the amount of habitat impacted, limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.
<b>Medium</b>	Minimisation and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.
<b>Low</b>	Minimisation and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities.
<b>Very Low</b>	Minimisation mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.





**Figure 2-1** Habitats of the Pembroke-Poseidon powerline project.

**Table 2-3** Site-specific summary, comments and recommendations on the route associated with the Pembroke-Poseidon powerline project.

Basic information	Recommendations	Photographs
<p>Sampling Point Name: PemPos 1</p> <p>Longitude: 27.522141</p> <p>Latitude: -32.885655</p> 	<p>Findings: No specific ecological constraints were recorded</p> <p>Sensitivity: Very Low</p> <p>Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMP.</p>	 

**Sampling Point Name:** PemPos 2

**Longitude:** 27.522391

**Latitude:** -32.887139



**Findings:** No specific ecological constraints were recorded

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMP.



**Sampling Point Name:** PemPos 3

**Longitude:** 27.522556

**Latitude:** -32.89068



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMP.



**Sampling Point Name:** PemPos 4

**Longitude:** 27.522829

**Latitude:** -32.894476

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low







Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 5

**Longitude:** 27.522389

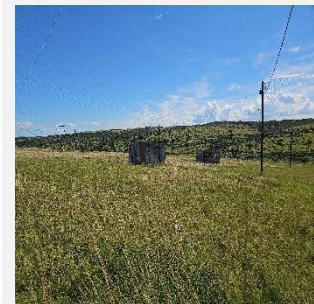
**Latitude:** -32.897898



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: Very Low

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: Very Low

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 6

**Longitude:** 27.522601

**Latitude:** -32.901049

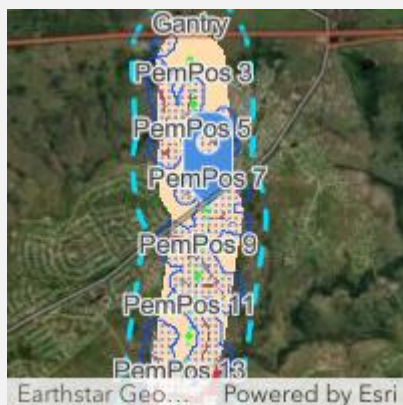




**Sampling Point Name:** PemPos 7

**Longitude:** 27.524775

**Latitude:** -32.90425



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 8

**Longitude:** 27.524087

**Latitude:** -32.908383

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 9

**Longitude:** 27.523281

**Latitude:** -32.912824



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 10

**Longitude:** 27.522851

**Latitude:** -32.916258





**Sampling Point Name:** PemPos 11

**Longitude:** 27.522065

**Latitude:** -32.920465



**Findings:** No specific ecological constraints were recorded

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMP.



**Sampling Point Name:** PemPos 12

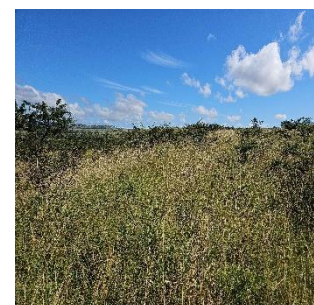
**Longitude:** 27.521407

**Latitude:** -32.924077

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring





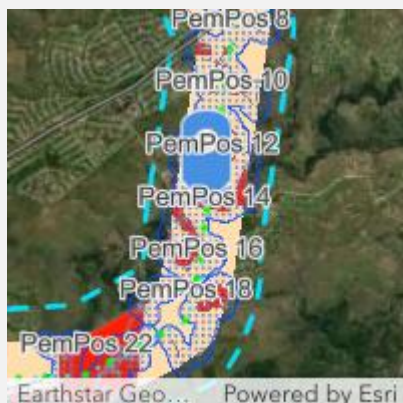
needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 13

**Longitude:** 27.520569

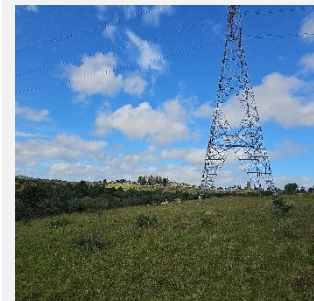
**Latitude:** -32.928939



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 14

**Longitude:** 27.520112

**Latitude:** -32.931486





**Sampling Point Name:** PemPos 15

**Longitude:** 27.519575

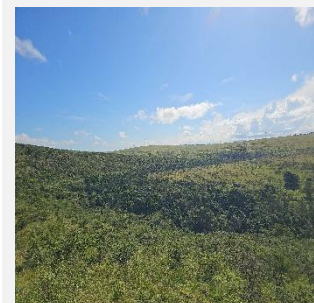
**Latitude:** -32.935203



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

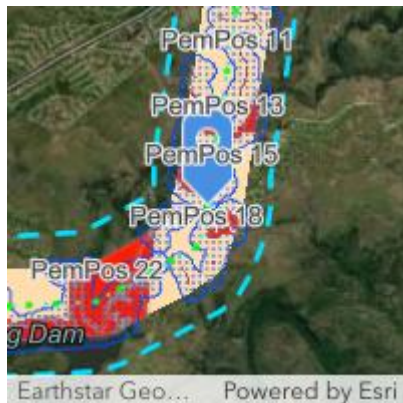
**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 16

**Longitude:** 27.518976

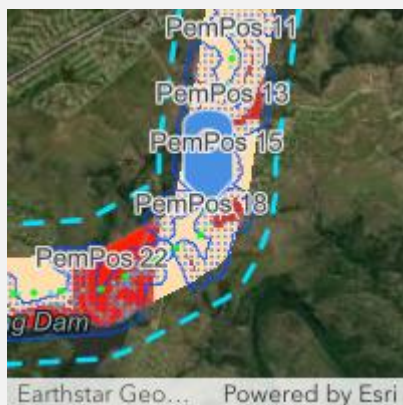
**Latitude:** -32.937958



**Sampling Point Name:** PemPos 17

**Longitude:** 27.518223

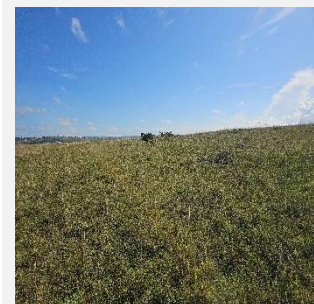
**Latitude:** -32.939986



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

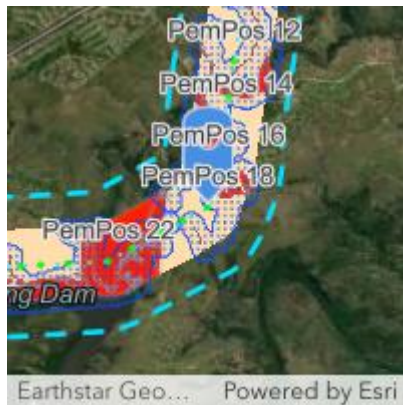


**Sampling Point Name:** PemPos 18

**Longitude:** 27.517204

**Latitude:** -32.943115

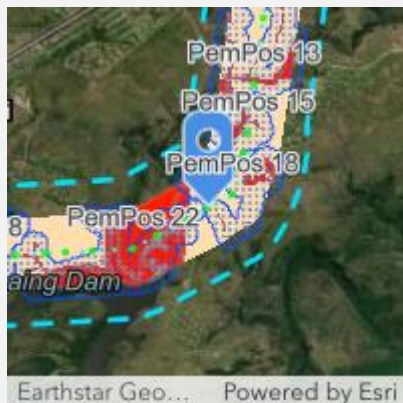




**Sampling Point Name:** PemPos 19

**Longitude:** 27.513397

**Latitude:** -32.944885



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMP.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

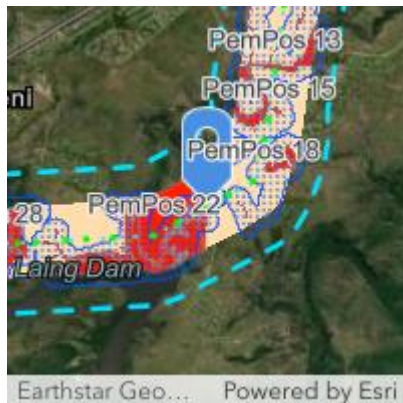
**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMP.



**Sampling Point Name:** PemPos 20

**Longitude:** 27.510205

**Latitude:** -32.946427



**Sampling Point Name:** PemPos 21

**Longitude:** 27.50553

**Latitude:** -32.94853



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 22

**Longitude:** 27.501996

**Latitude:** -32.950171





**Sampling Point Name:** PemPos 23

**Longitude:** 27.495733

**Latitude:** -32.95046



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 24

**Longitude:** 27.49164

**Latitude:** -32.950634



**Sampling Point Name:** PemPos 25

**Longitude:** 27.48851

**Latitude:** -32.950781



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 26

**Longitude:** 27.48391

**Latitude:** -32.951003

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 27

**Longitude:** 27.481035

**Latitude:** -32.951145



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 29

**Longitude:** 27.471505

**Latitude:** -32.951589



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 31

**Longitude:** 27.463861

**Latitude:** -32.95191



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

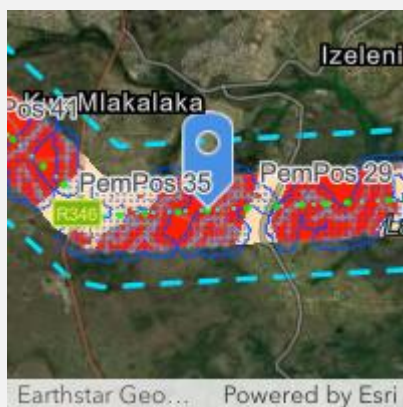




**Sampling Point Name:** PemPos 33

**Longitude:** 27.45336

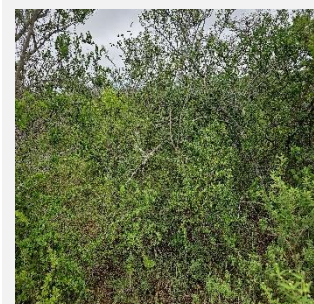
**Latitude:** -32.952444



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

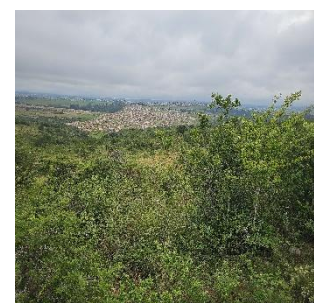
**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 34

**Longitude:** 27.448864

**Latitude:** -32.952648





**Sampling Point Name:** PemPos 35

**Longitude:** 27.443741

**Latitude:** -32.95289



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 36

**Longitude:** 27.439933

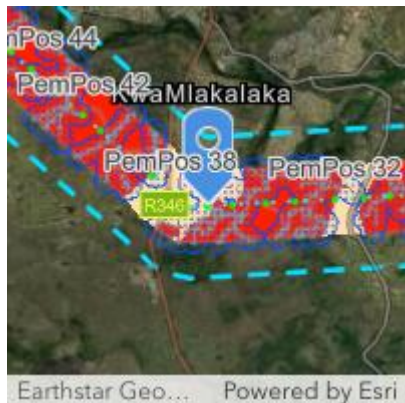
**Latitude:** -32.953055

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 37

**Longitude:** 27.436888

**Latitude:** -32.953005



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 38 House

**Longitude:** 27.434772

**Latitude:** -32.951425

:





**Sampling Point Name:** PemPos 39

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: Very Low

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

Not assessed

**Sampling Point Name:** PemPos 40

**Longitude:** 27.428141

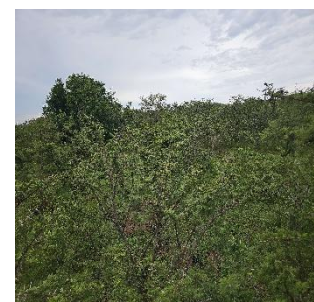
**Latitude:** -32.946687



Findings: No specific ecological constraints were recorded.

Sensitivity: High

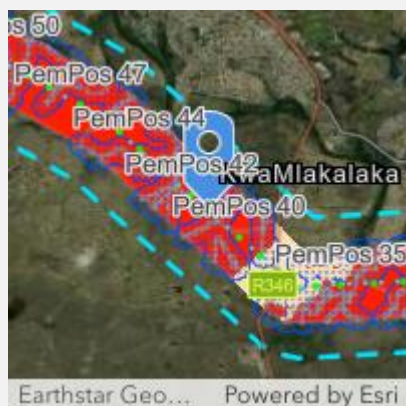
Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 41

**Longitude:** 27.423497

**Latitude:** -32.943282



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 42

**Longitude:** 27.420804

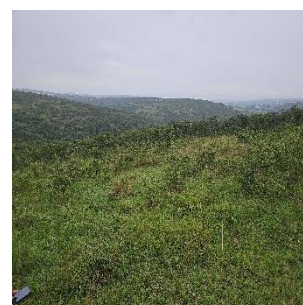
**Latitude:** -32.941303



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 43

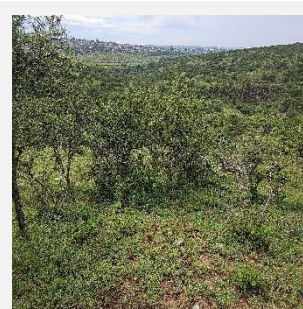
**Longitude:** 27.416684

**Latitude:** -32.93832

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due







to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

:



**Sampling Point Name:** PemPos 44

**Longitude:** 27.41289

**Latitude:** -32.935393

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

:



**Sampling Point Name:** PemPos 45

**Longitude:** 27.409891

**Latitude:** -32.93319

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 46

**Longitude:** 27.407519

**Latitude:** -32.931342

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 47

**Longitude:** 27.40385

**Latitude:** -32.92966

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 48

**Longitude:** 27.398995

**Latitude:** -32.927402

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 49

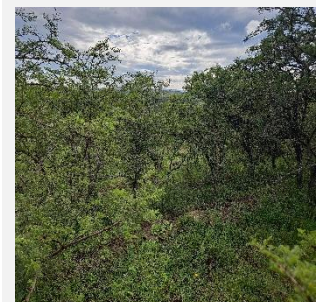
**Longitude:** 27.395914

**Latitude:** -32.925995

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 50

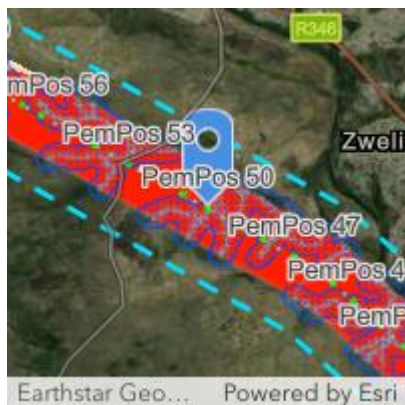
**Longitude:** 27.39055

**Latitude:** -32.923503

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 51

**Longitude:** 27.386716

**Latitude:** -32.921684

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 52

**Longitude:** 27.382097

**Latitude:** -32.919593

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 53

**Longitude:** 27.378462

**Latitude:** -32.91779

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 54

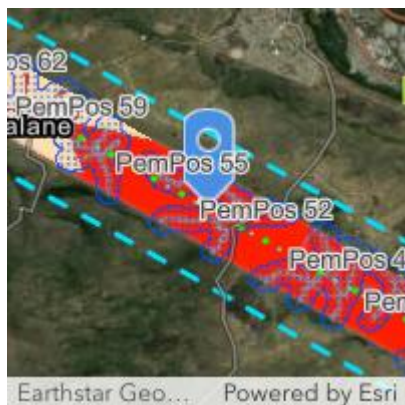
**Longitude:** 27.373303

**Latitude:** -32.915391

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 55

**Longitude:** 27.369378

**Latitude:** -32.913545

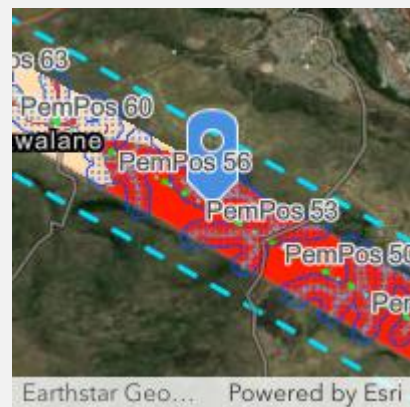
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 56

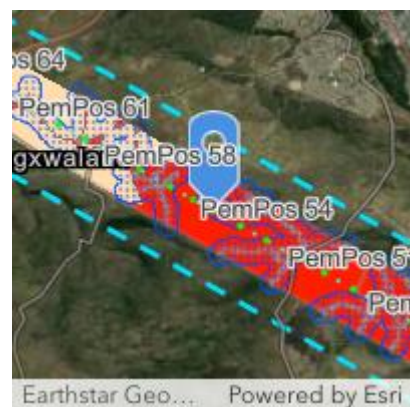
**Longitude:** 27.36506

**Latitude:** -32.911561

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 57

**Longitude:** 27.362078

**Latitude:** -32.910132

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 58

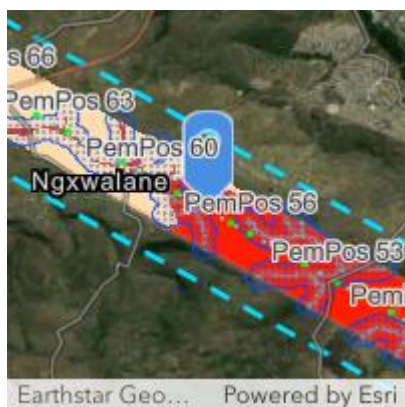
**Longitude:** 27.358549

**Latitude:** -32.908538

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 59

**Longitude:** 27.353848

**Latitude:** -32.906279

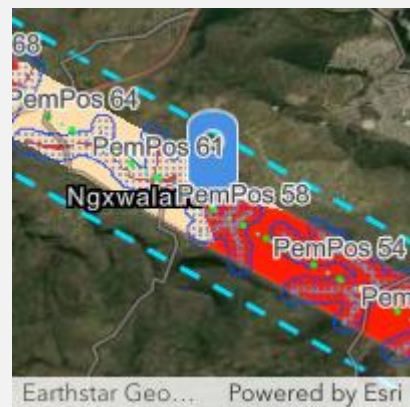
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 60

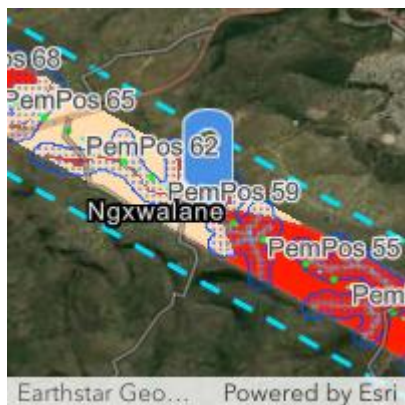
**Longitude:** 27.349984

**Latitude:** -32.904435

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 61

**Longitude:** 27.345414

**Latitude:** -32.902342







**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





 <p>Earthstar Geo... Powered by Esri</p>		
<p><b>Sampling Point Name:</b> PemPos 62</p> <p><b>Longitude:</b> 27.341461 <b>Latitude:</b> -32.900467</p>  <p>Earthstar Geo... Powered by Esri</p>	<p><b>Findings:</b> No specific ecological constraints were recorded, but near water resources</p> <p><b>Sensitivity:</b> Very Low</p> <p><b>Recommendations:</b> No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.</p>	 
<p><b>Sampling Point Name:</b> PemPos 63</p> <p><b>Longitude:</b> 27.337105 <b>Latitude:</b> -32.898425</p>	<p><b>Findings:</b> No specific ecological constraints were recorded, but near water resources</p> <p><b>Sensitivity:</b> Very Low</p> <p><b>Recommendations:</b> No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.</p>	



**Sampling Point Name:** PemPos 64

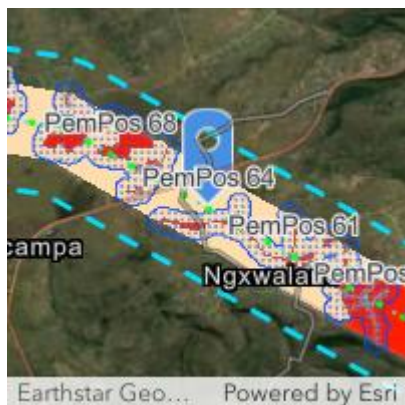
**Longitude:** 27.332238

**Latitude:** -32.896123

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 65

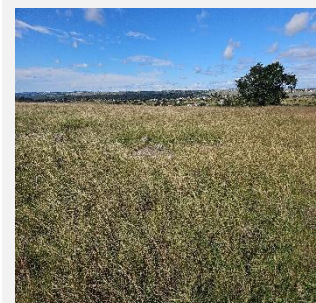
**Longitude:** 27.328664

**Latitude:** -32.894464

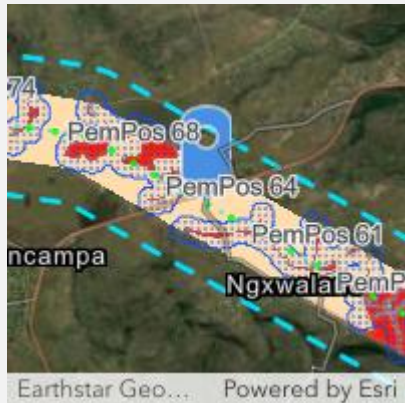
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 66

**Longitude:** 27.325093

**Latitude:** -32.89277

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 67

**Longitude:** 27.320618

**Latitude:** -32.890671


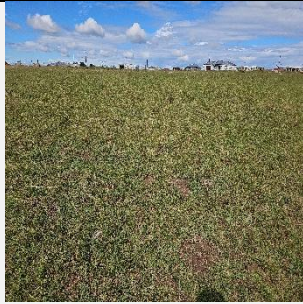
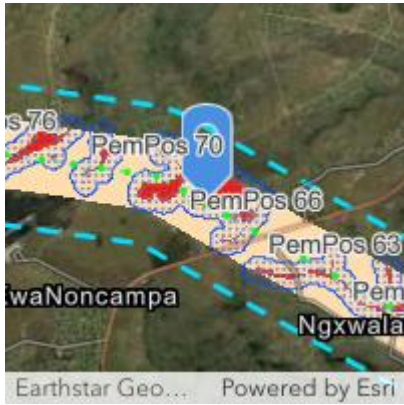



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





		
<p><b>Sampling Point Name:</b> PemPos 68</p> <p><b>Longitude:</b> 27.317335 <b>Latitude:</b> -32.889138</p> 	<p><b>Findings:</b> No specific ecological constraints were recorded and falls in wetland delineations.</p> <p><b>Sensitivity:</b> High</p> <p><b>Recommendations:</b> No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.</p>	 
<p><b>Sampling Point Name:</b> PemPos 69</p> <p><b>Longitude:</b> 27.313967 <b>Latitude:</b> -32.887576</p>	<p><b>Findings:</b> No specific ecological constraints were recorded, but near water resources</p> <p><b>Sensitivity:</b> Very Low</p> <p><b>Recommendations:</b> No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.</p>	



**Sampling Point Name:** PemPos 70

**Longitude:** 27.309896

**Latitude:** -32.885669

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 71

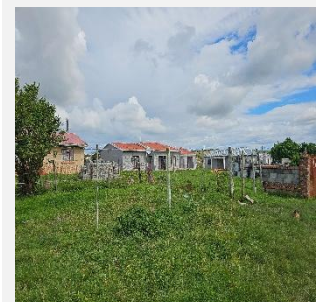
**Longitude:** 27.305327

**Latitude:** -32.884967

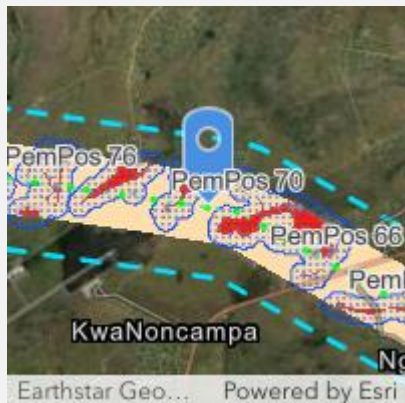
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 72

**Longitude:** 27.301351

**Latitude:** -32.884588

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 73

**Longitude:** 27.297034

**Latitude:** -32.884116

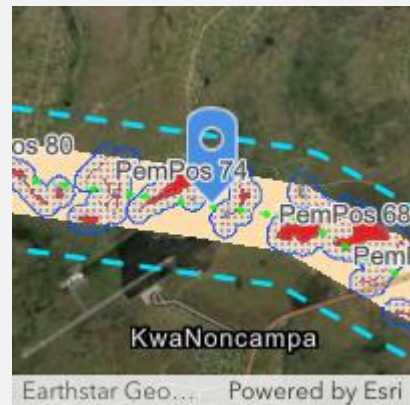
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 74

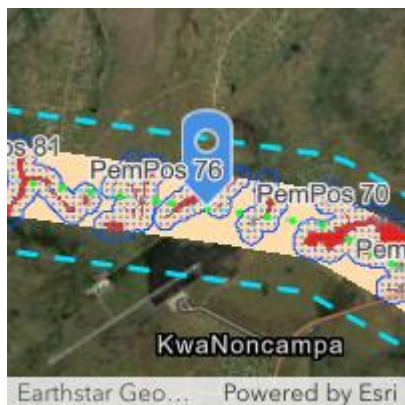
**Longitude:** 27.292227

**Latitude:** -32.883507

**Findings:** Thornveld  
thicket  
Valley up north west

**Sensitivity:** Low

**Recommendations:** No  
mitigation required, due  
to the close proximity to  
the rural development;  
however, monitoring  
needs to be adhered to in  
section 3 and EMPr.



**Sampling Point Name:** PemPos 75

**Longitude:** 27.286725

**Latitude:** -32.882834

**Findings:** No specific  
ecological constraints  
were recorded, but near  
water resources

**Sensitivity:** Very Low

**Recommendations:** No  
mitigation required, due  
to the close proximity to  
the rural development;  
however, monitoring  
needs to be adhered to in  
section 3 and EMPr.





**Sampling Point Name:** PemPos 76

**Longitude:** 27.284322

**Latitude:** -32.882535

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 77

**Longitude:** 27.278815

**Latitude:** -32.881893

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.







**Sampling Point Name:** PemPos 78

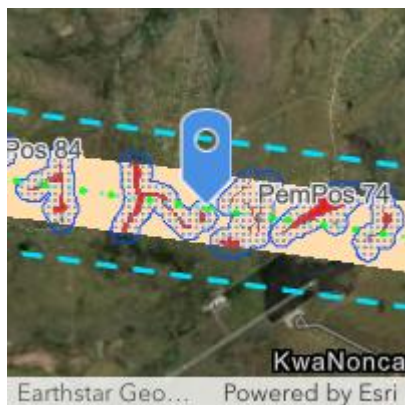
**Longitude:** 27.274401

**Latitude:** -32.881342

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 79

**Longitude:** 27.269941

**Latitude:** -32.880829

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



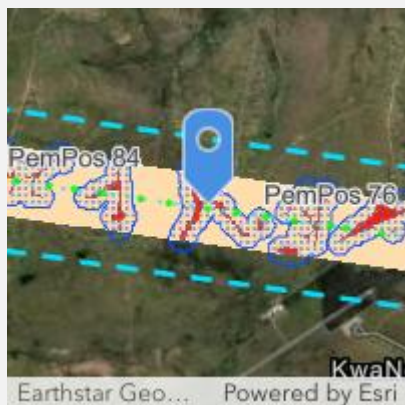




**Sampling Point Name:** PemPos 80

**Longitude:** 27.265516

**Latitude:** -32.880289



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Sampling Point Name:** PemPos 81

**Longitude:** 27.259656

**Latitude:** -32.879597

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.





**Sampling Point Name:** PemPos 82

**Longitude:** 27.255264

**Latitude:** -32.879035



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

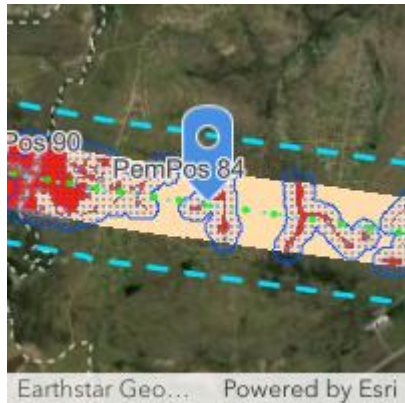


**Sampling Point Name:** PemPos 83

**Longitude:** 27.249472

**Latitude:** -32.878359

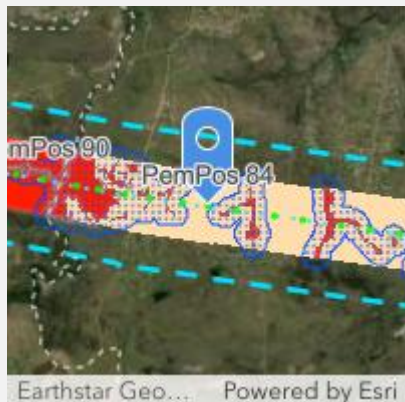




**Sampling Point Name:** PemPos 84

**Longitude:** 27.245042

**Latitude:** -32.877834



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 85

**Longitude:** 27.241283

**Latitude:** -32.877354

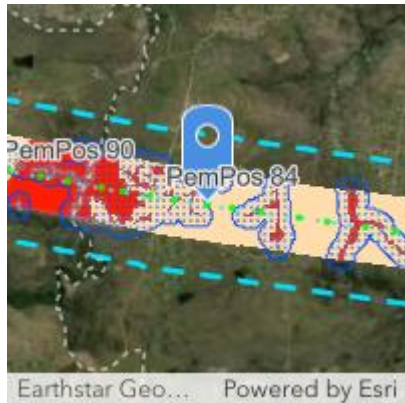
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



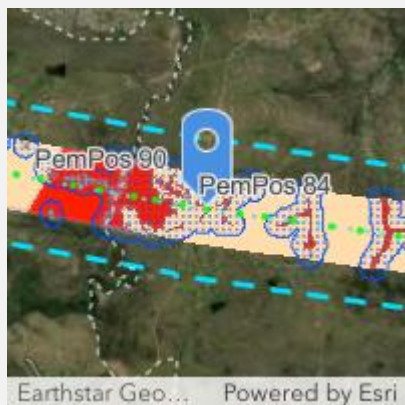




**Sampling Point Name:** PemPos 86

**Longitude:** 27.23628

**Latitude:** -32.876735



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

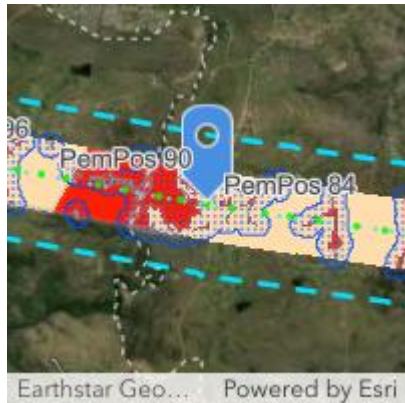
**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 87

**Longitude:** 27.23244

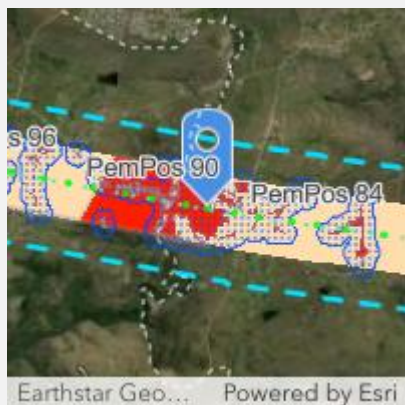
**Latitude:** -32.876246



**Sampling Point Name:** PemPos 88

**Longitude:** 27.228303

**Latitude:** -32.875645



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 89

**Longitude:** 27.225029

**Latitude:** -32.875164

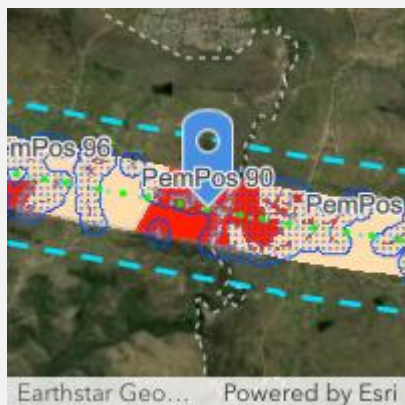




**Sampling Point Name:** PemPos 90

**Longitude:** 27.219926

**Latitude:** -32.874302



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

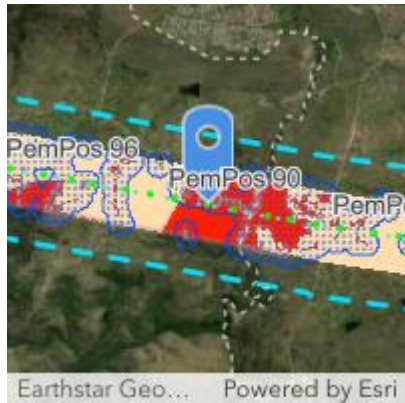


Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

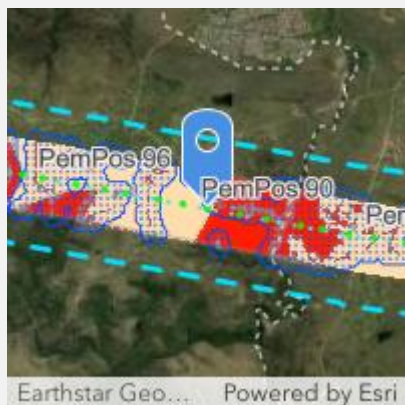




**Sampling Point Name:** PemPos 92

**Longitude:** 27.210742

**Latitude:** -32.872945



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.

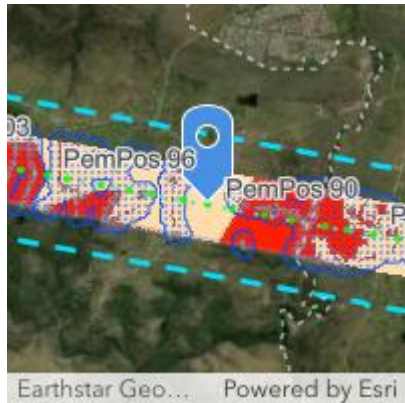


**Sampling Point Name:** PemPos 93

**Longitude:** 27.206958

**Latitude:** -32.872377

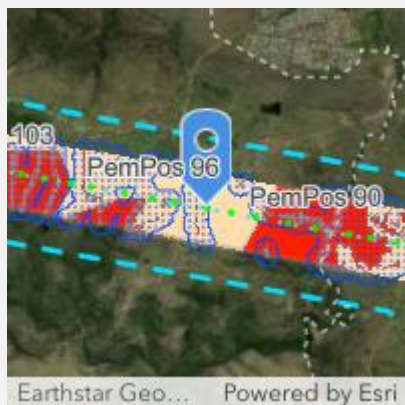




**Sampling Point Name:** PemPos 94

**Longitude:** 27.203331

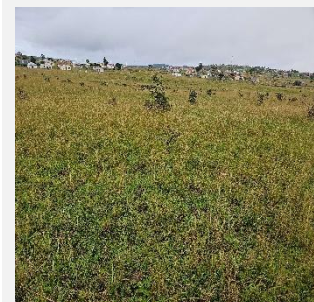
**Latitude:** -32.871827



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

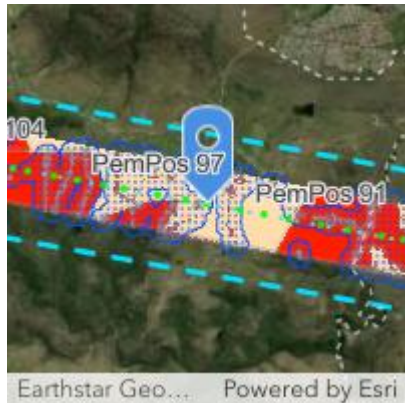
**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 95

**Longitude:** 27.198295

**Latitude:** -32.871107



**Sampling Point Name:** PemPos 96

**Longitude:** 27.19501

**Latitude:** -32.870602



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Sampling Point Name:** PemPos 97

**Longitude:** 27.190654

**Latitude:** -32.869856

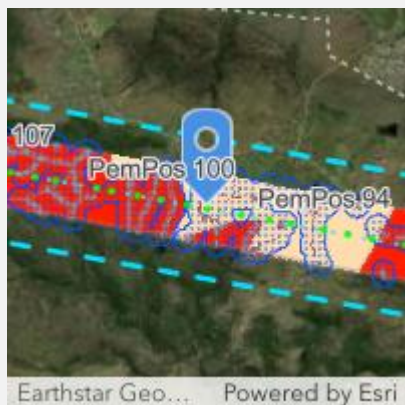




**Sampling Point Name:** PemPos 98

**Longitude:** 27.185464

**Latitude:** -32.86905



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** FNo mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

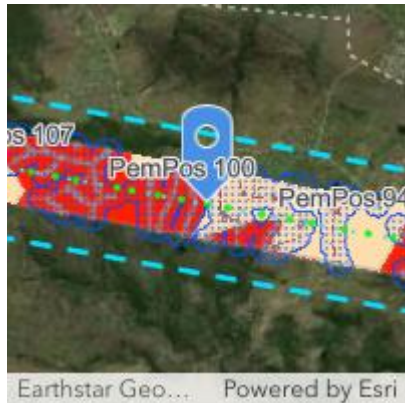
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-pearch devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 99

**Longitude:** 27.182346

**Latitude:** -32.868612



**Sampling Point Name:** PemPos 100

**Longitude:** 27.178429

**Latitude:** -32.867939



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 101

**Longitude:** 27.174764

**Latitude:** -32.86744

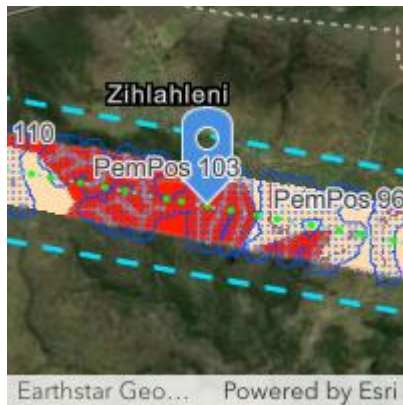
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 102

**Longitude:** 27.170658

**Latitude:** -32.866719



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

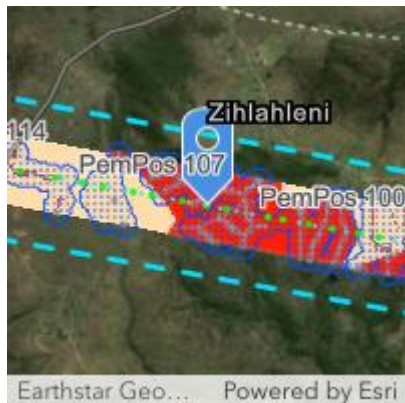
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 105

**Longitude:** 27.159205

**Latitude:** -32.865101



**Sampling Point Name:** PemPos 106

**Longitude:** 27.155454

**Latitude:** -32.864527



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 107

**Longitude:** 27.150696

**Latitude:** -32.863689





**Sampling Point Name:** PemPos 108

**Longitude:** 27.14786

**Latitude:** -32.863236



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 109

**Longitude:** 27.143203

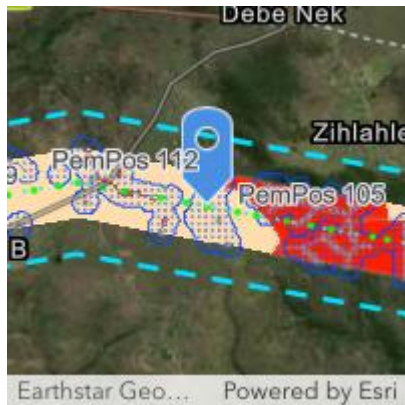
**Latitude:** -32.862518

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 110

**Longitude:** 27.14005

**Latitude:** -32.862064

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low



**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 111

**Longitude:** 27.136026

**Latitude:** -32.861417

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Veery Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans







marked, 8 spans  
unmarked) .



**Sampling Point Name:** PemPos 112

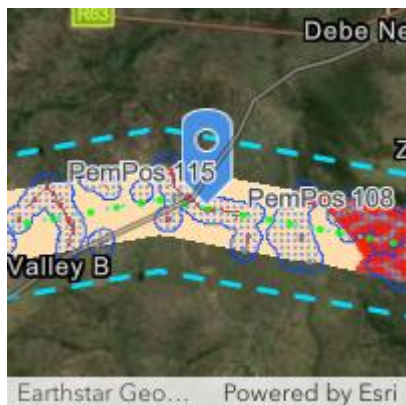
**Longitude:** 27.130534

**Latitude:** -32.860568

**Findings:** No specific  
ecological constraints  
were recorded.

**Sensitivity:** Very Low

**Recommendations:** It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked) .



**Sampling Point Name:** PemPos 113 & 114

**Longitude:** 27.123277

**Latitude:** -32.859436

**Findings:** No specific  
ecological constraints  
were recorded.

**Sensitivity:** Veery Low

**Recommendations:** It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked) .





**Sampling Point Name:** PemPos 115

**Longitude:** 27.120399

**Latitude:** -32.859886

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Veery Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 116

**Longitude:** 27.116652

**Latitude:** -32.860447

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Veery Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .







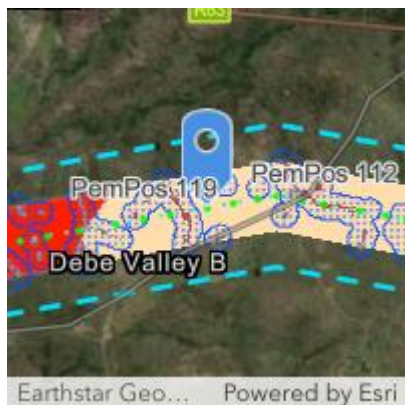
**Sampling Point Name:** PemPos 117

**Longitude:** 27.112668

**Latitude:** -32.861083

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Veery Low



**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 118

**Longitude:** 27.106953

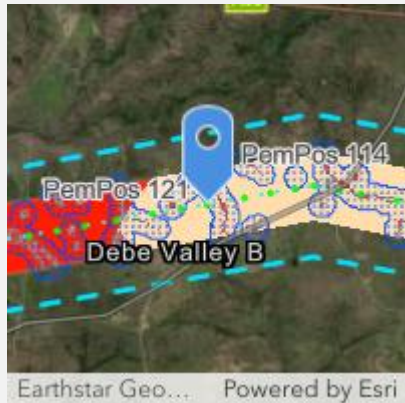
**Latitude:** -32.861889

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Veery Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .





**Sampling Point Name:** PemPos 119

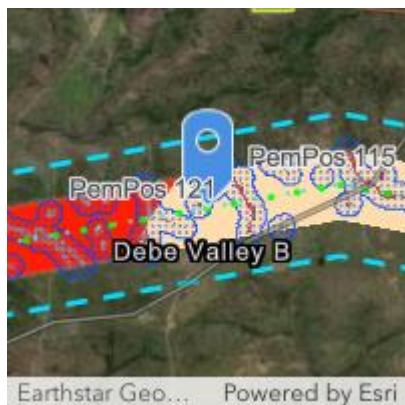
**Longitude:** 27.102879

**Latitude:** -32.862497

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 120

**Longitude:** 27.098581

**Latitude:** -32.863128

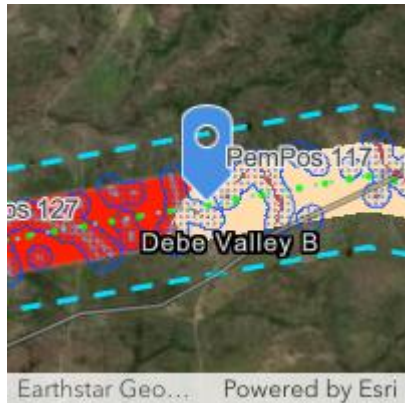
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .







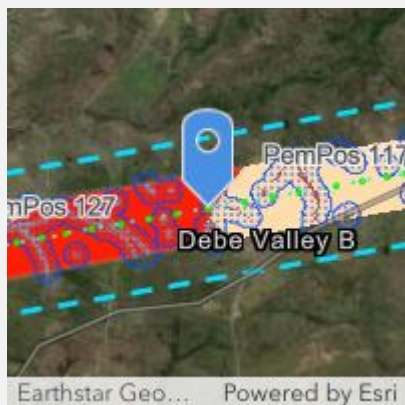
marked, 8 spans  
unmarked) .



**Sampling Point Name:** PemPos 121

**Longitude:** 27.092902

**Latitude:** -32.863945



Findings: No specific  
ecological constraints  
were recorded.

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



Findings: No specific  
ecological constraints  
were recorded.

Sensitivity: High

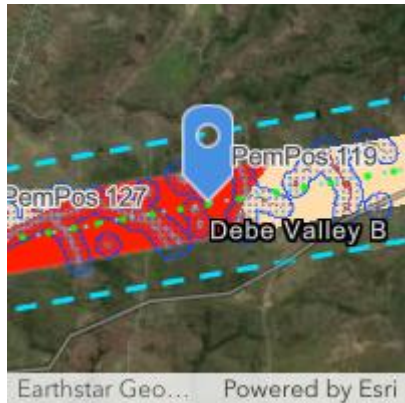
**Sampling Point Name:** PemPos 122

**Longitude:** 27.088073

**Latitude:** -32.864691

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)

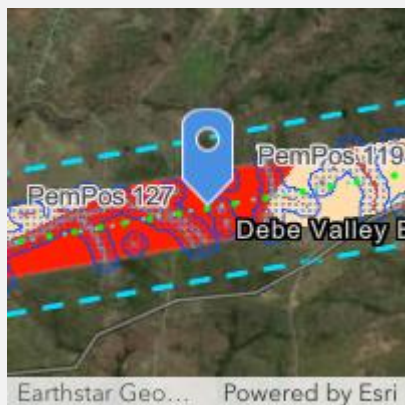




**Sampling Point Name:** PemPos 123

**Longitude:** 27.084005

**Latitude:** -32.865303



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



Findings: No specific ecological constraints were recorded, but near water resources

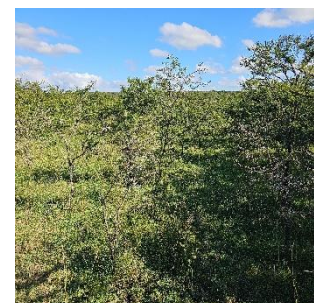
Sensitivity: High

**Sampling Point Name:** PemPos 124

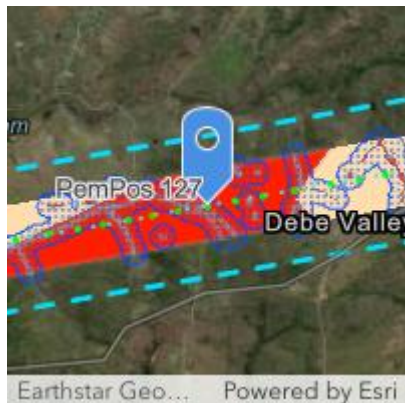
**Longitude:** 27.079649

**Latitude:** -32.865999

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



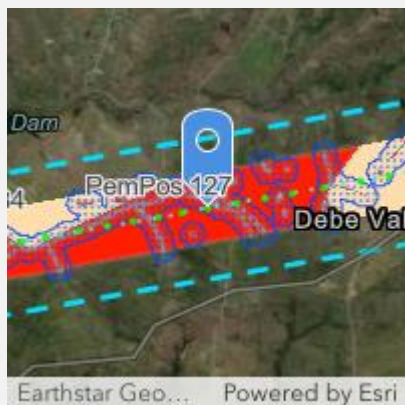




**Sampling Point Name:** PemPos 125

**Longitude:** 27.075103

**Latitude:** -32.86662



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



Findings: No specific ecological constraints were recorded.

Sensitivity: High

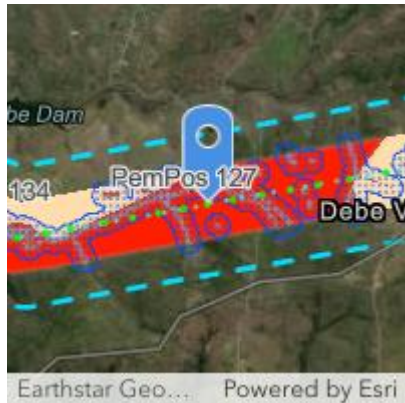
**Sampling Point Name:** PemPos 126

**Longitude:** 27.071233

**Latitude:** -32.867196

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

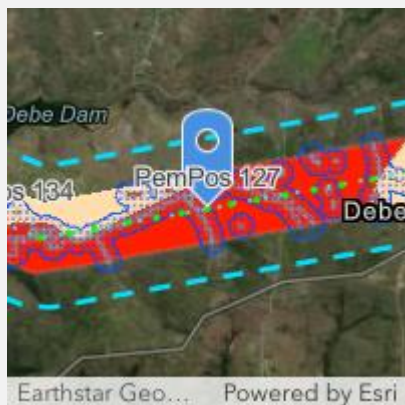




**Sampling Point Name:** PemPos 127

**Longitude:** 27.067609

**Latitude:** -32.867714



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Sampling Point Name:** PemPos 128

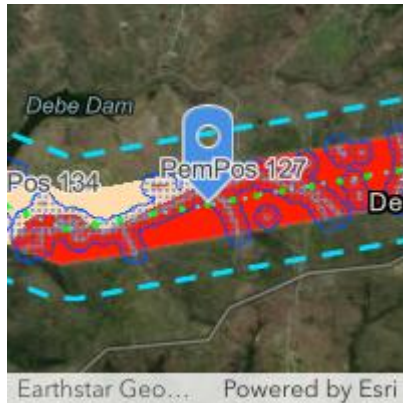
**Longitude:** 27.063656

**Latitude:** -32.868311

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)







**Sampling Point Name:** PemPos 129

**Longitude:** 27.05979

**Latitude:** -32.868879



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

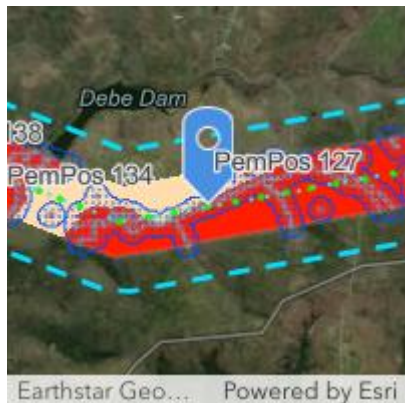
**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 130

**Longitude:** 27.05544

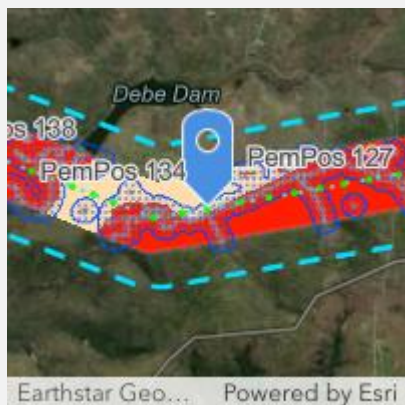
**Latitude:** -32.869519



**Sampling Point Name:** PemPos 131

**Longitude:** 27.050334

**Latitude:** -32.870318



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 132

**Longitude:** 27.046481

**Latitude:** -32.870851

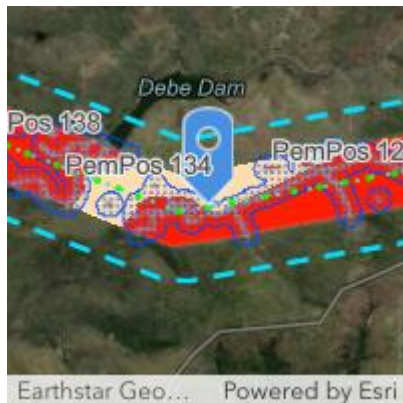
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



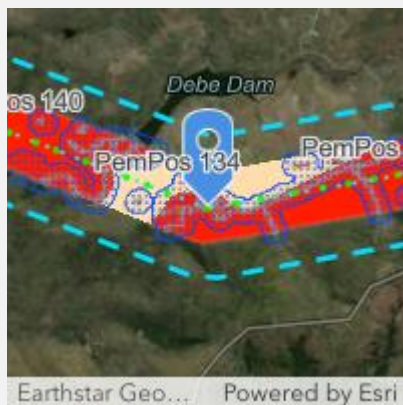




**Sampling Point Name:** PemPos 133

**Longitude:** 27.042047

**Latitude:** -32.871528



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

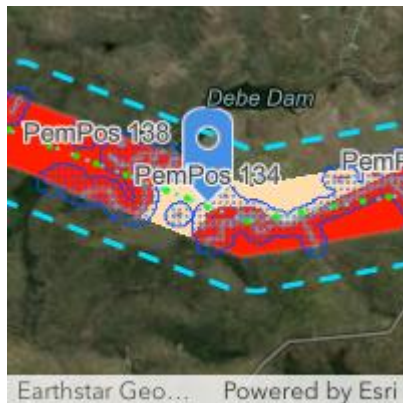
**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

**Sampling Point Name:** PemPos 134

**Longitude:** 27.035911

**Latitude:** -32.869551

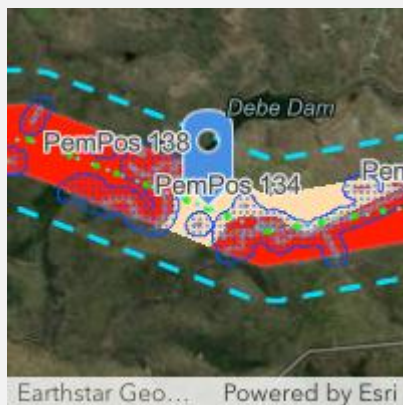




**Sampling Point Name:** PemPos 135

**Longitude:** 27.032803

**Latitude:** -32.868552



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** Very Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

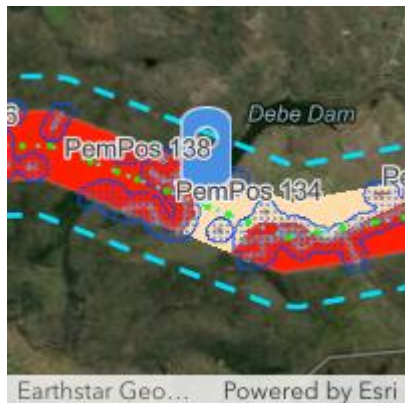
**Sampling Point Name:** PemPos 136

**Longitude:** 27.02962

**Latitude:** -32.867509



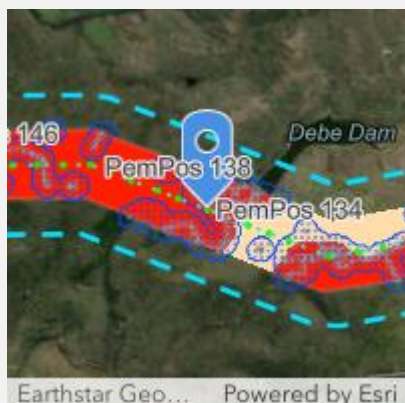




**Sampling Point Name:** PemPos 137

**Longitude:** 27.023382

**Latitude:** -32.865457



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

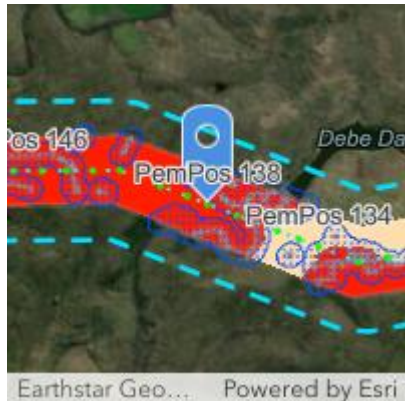
**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

**Sampling Point Name:** PemPos 138

**Longitude:** 27.018877

**Latitude:** -32.864081

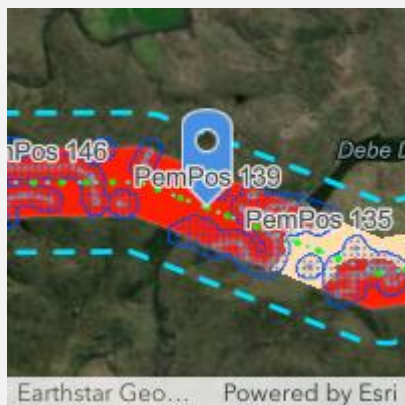




**Sampling Point Name:** PemPos 139

**Longitude:** 27.01584

**Latitude:** -32.863097



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

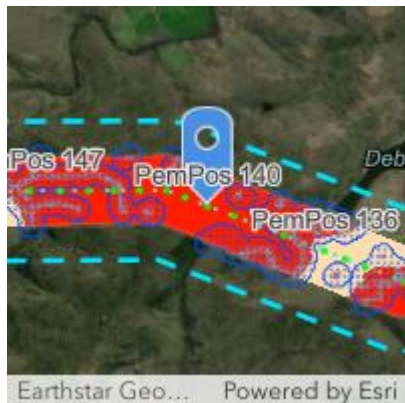


**Sampling Point Name:** PemPos 140

**Longitude:** 27.011697

**Latitude:** -32.861773

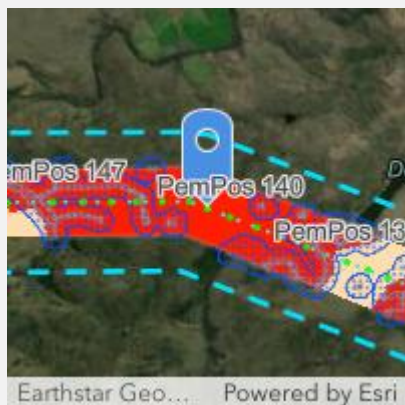




**Sampling Point Name:** PemPos 141

**Longitude:** 27.008221

**Latitude:** -32.860588



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

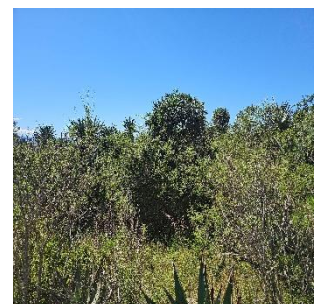
**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

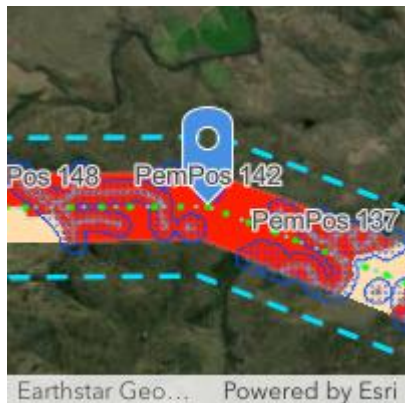
**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 142

**Longitude:** 27.005387

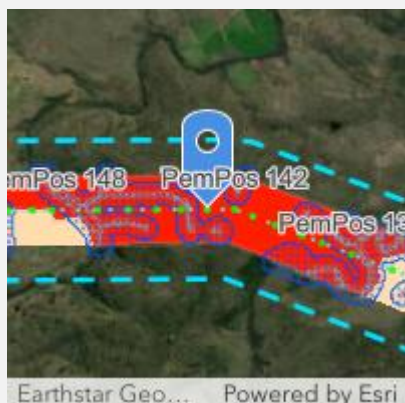
**Latitude:** -32.859685



**Sampling Point Name:** PemPos 143

**Longitude:** 27.001306

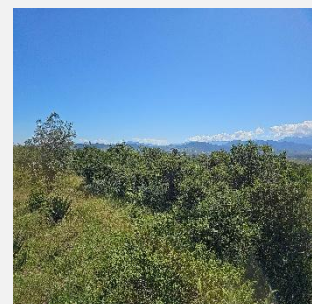
**Latitude:** -32.859719



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

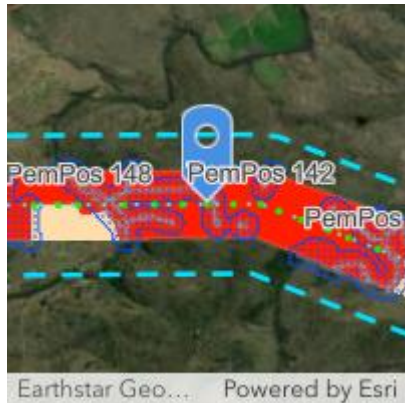


**Sampling Point Name:** PemPos 144

**Longitude:** 26.997294

**Latitude:** -32.859747

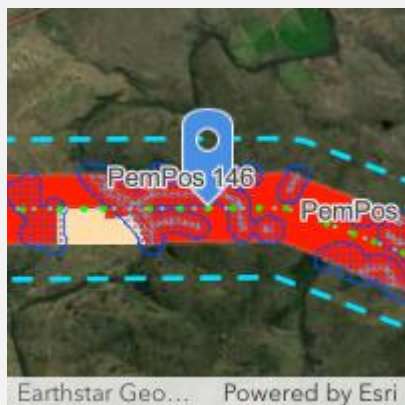




**Sampling Point Name:** PemPos 145

**Longitude:** 26.993373

**Latitude:** -32.859765



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



Findings: No specific ecological constraints were recorded, but near water resources

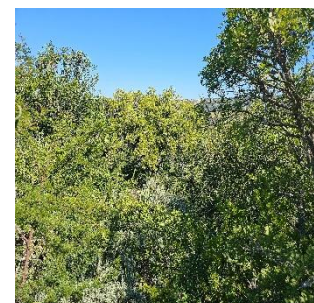
Sensitivity: High

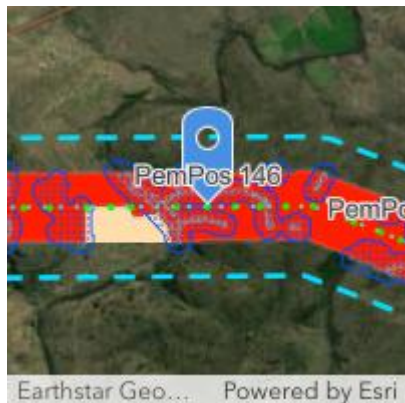
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

**Sampling Point Name:** PemPos 146

**Longitude:** 26.989238

**Latitude:** -32.859737

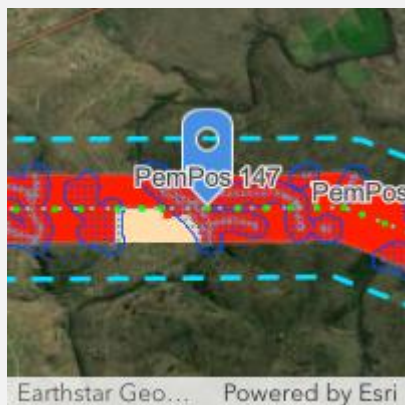




**Sampling Point Name:** PemPos 147

**Longitude:** 26.98452

**Latitude:** -32.859823



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Sampling Point Name:** PemPos 148

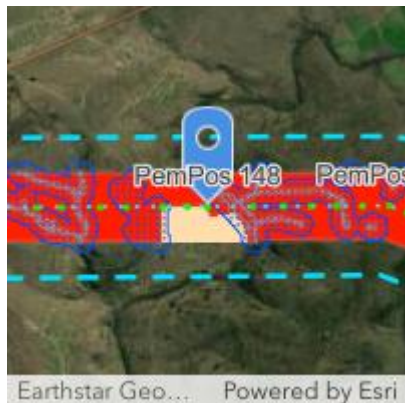
**Longitude:** 26.977542

**Latitude:** -32.85979

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



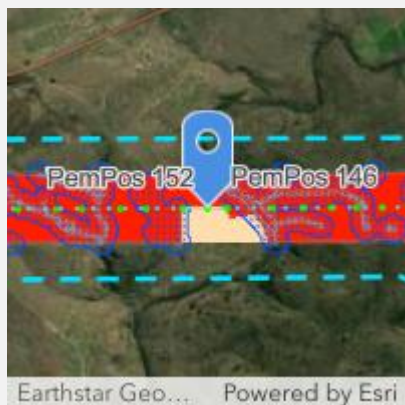




**Sampling Point Name:** PemPos 149

**Longitude:** 26.974471

**Latitude:** -32.859845



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** Very Low

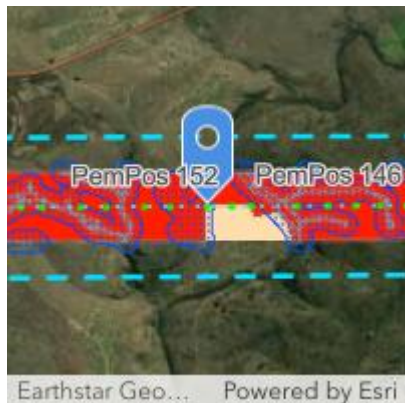
**Sampling Point Name:** PemPos 150

**Longitude:** 26.970751

**Latitude:** -32.85983

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

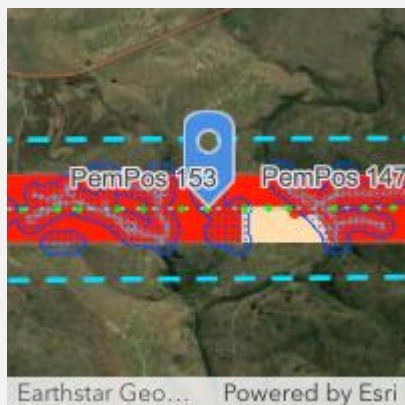




**Sampling Point Name:** PemPos 151

**Longitude:** 26.965085

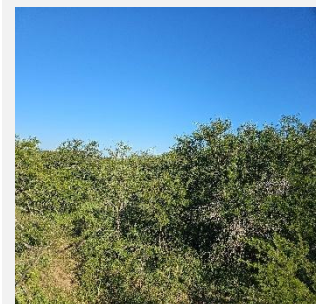
**Latitude:** -32.859841



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 152

**Longitude:** 26.961095

**Latitude:** -32.859886

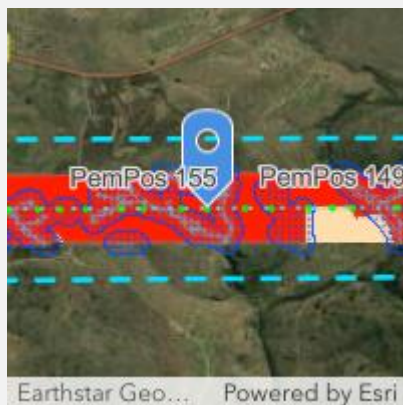




**Sampling Point Name:** PemPos 153

**Longitude:** 26.955308

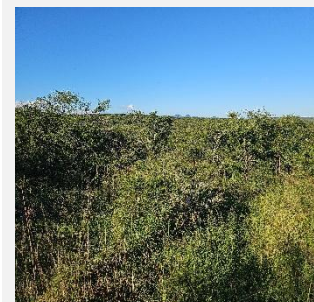
**Latitude:** -32.859894



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

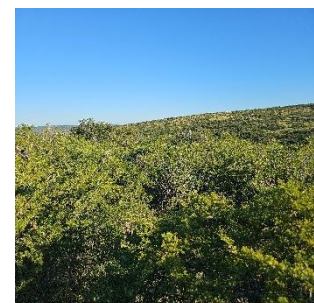
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

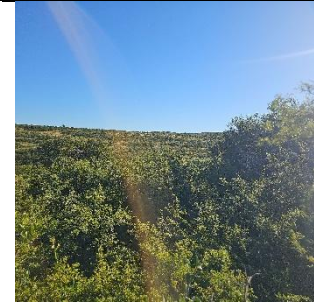
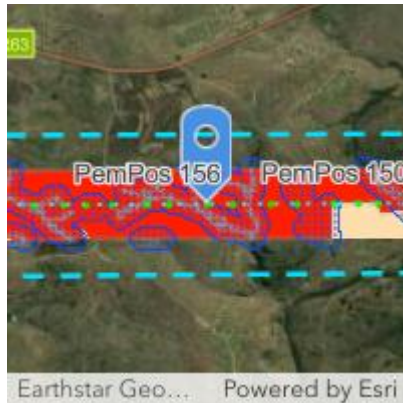
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 154

**Longitude:** 26.951325

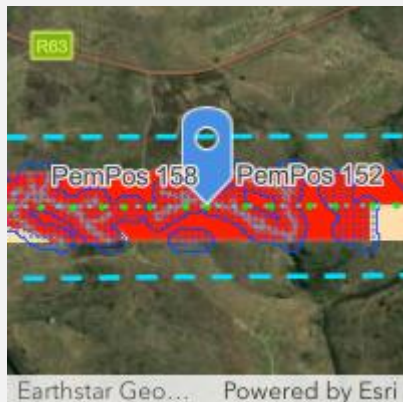
**Latitude:** -32.859932



**Sampling Point Name:** PemPos 155

**Longitude:** 26.945454

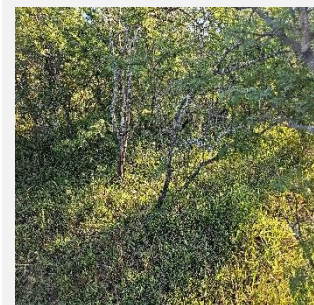
**Latitude:** -32.859952



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 156

**Longitude:** 26.942053

**Latitude:** -32.859993

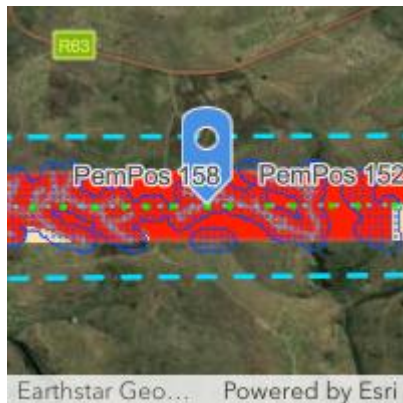
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)







marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 157

**Longitude:** 26.936684

**Latitude:** -32.860035



Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 158

**Longitude:** 26.932739

**Latitude:** -32.860013



**Sampling Point Name:** PemPos 159

**Longitude:** 26.929345

**Latitude:** -32.860032



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

:



**Sampling Point Name:** PemPos 160

**Longitude:** 26.924765

**Latitude:** -32.860007

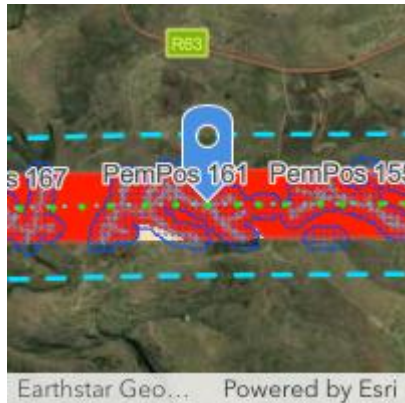
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans







marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 161

**Longitude:** 26.9199

**Latitude:** -32.860157



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



**Sampling Point Name:** PemPos 162

**Longitude:** 26.915313

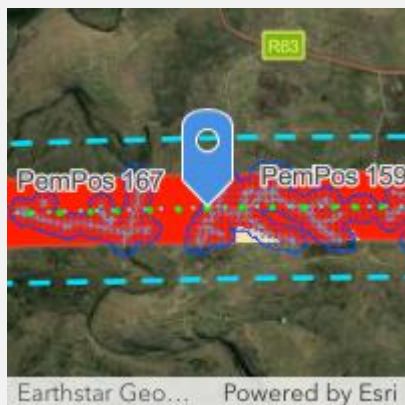
**Latitude:** -32.860159



**Sampling Point Name:** PemPos 163

**Longitude:** 26.909976

**Latitude:** -32.860223



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Sampling Point Name:** PemPos 164

**Longitude:** 26.905455

**Latitude:** -32.860356

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



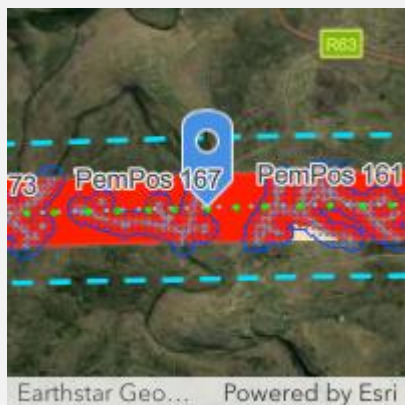




**Sampling Point Name:** PemPos 165

**Longitude:** 26.901104

**Latitude:** -32.860438



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

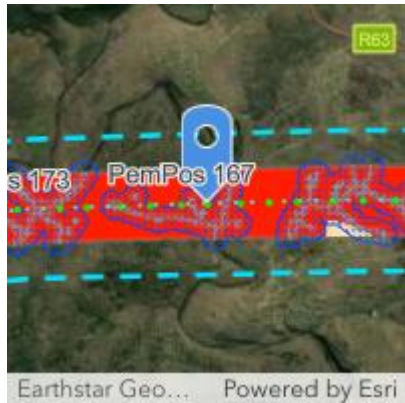


**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

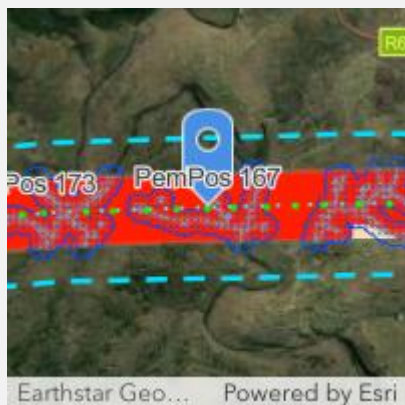




**Sampling Point Name:** PemPos 167

**Longitude:** 26.892047

**Latitude:** -32.860651



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 168

**Longitude:** 26.887288

**Latitude:** -32.860772

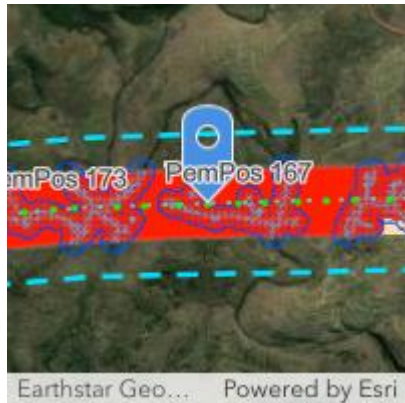
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



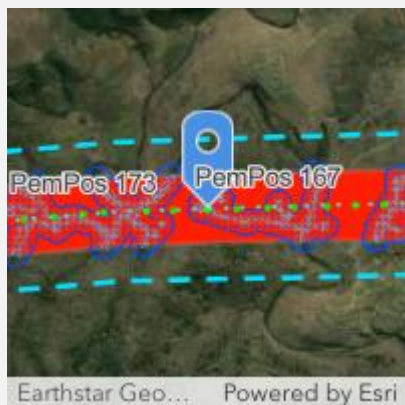




**Sampling Point Name:** PemPos 169

**Longitude:** 26.882792

**Latitude:** -32.860685



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 170

**Longitude:** 26.87761

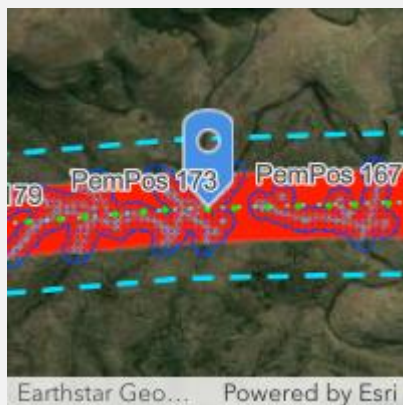
**Latitude:** -32.860919



**Sampling Point Name:** PemPos 171

**Longitude:** 26.873436

**Latitude:** -32.861051



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.

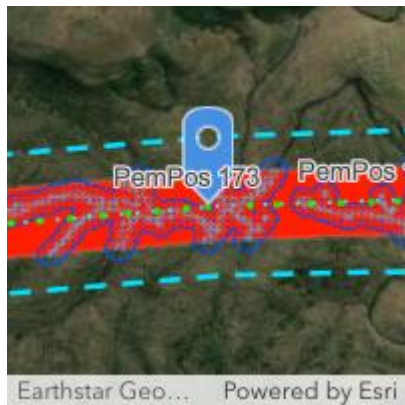


**Sampling Point Name:** PemPos 172

**Longitude:** 26.866922

**Latitude:** -32.861211

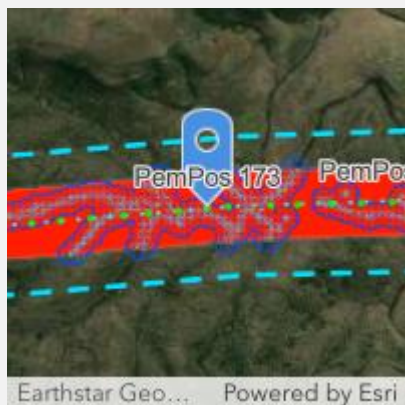




**Sampling Point Name:** PemPos 173

**Longitude:** 26.863725

**Latitude:** -32.861477



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



**Sampling Point Name:** PemPos 174

**Longitude:** 26.859213

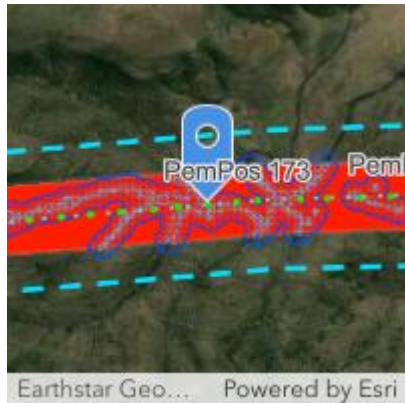
**Latitude:** -32.861776

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.

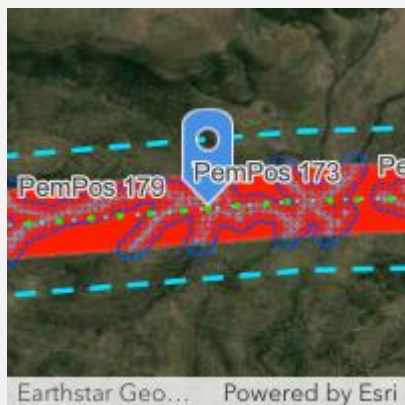




**Sampling Point Name:** PemPos 175

**Longitude:** 26.854656

**Latitude:** -32.862107



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



**Sampling Point Name:** PemPos 176

**Longitude:** 26.850824

**Latitude:** -32.862384

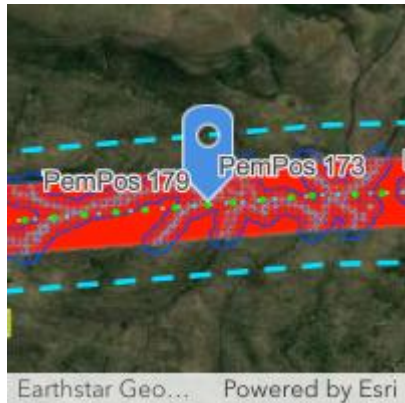
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



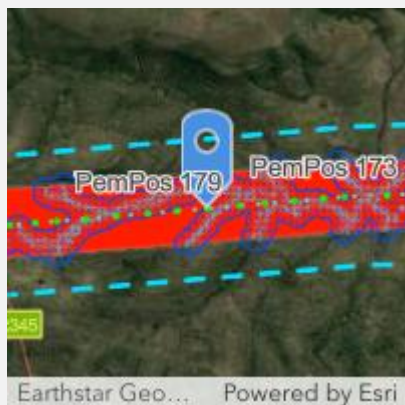




**Sampling Point Name:** PemPos 177

**Longitude:** 26.845919

**Latitude:** -32.862751



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

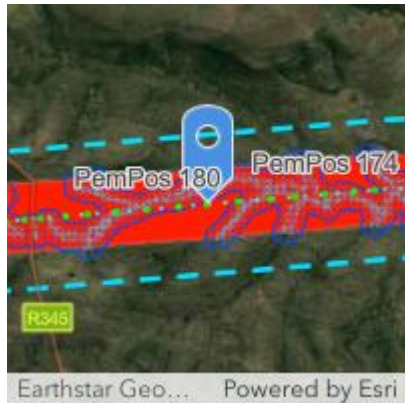
**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 178

**Longitude:** 26.841246

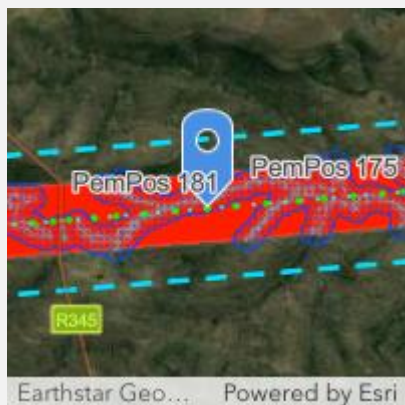
**Latitude:** -32.863106



**Sampling Point Name:** PemPos 179

**Longitude:** 26.836862

**Latitude:** -32.863381



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

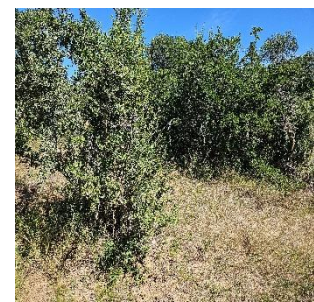
Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.

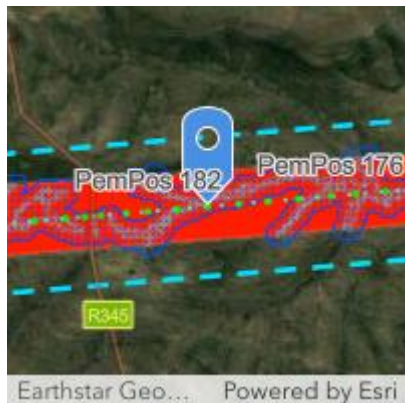


**Sampling Point Name:** PemPos 180

**Longitude:** 26.832001

**Latitude:** -32.863722

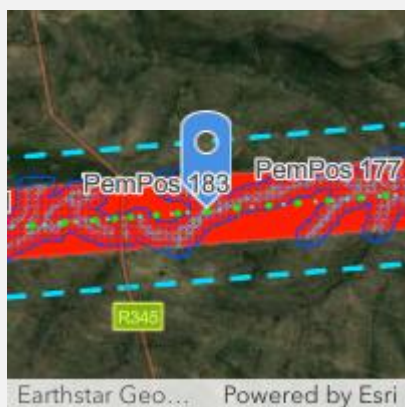




**Sampling Point Name:** PemPos 181

**Longitude:** 26.827396

**Latitude:** -32.864019



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Fit flight diverters every 5 m within the 100m buffer around the freshwater delineations.



Findings: No specific ecological constraints were recorded.

Sensitivity: High

**Sampling Point Name:** PemPos 182

**Longitude:** 26.822826

**Latitude:** -32.864351

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

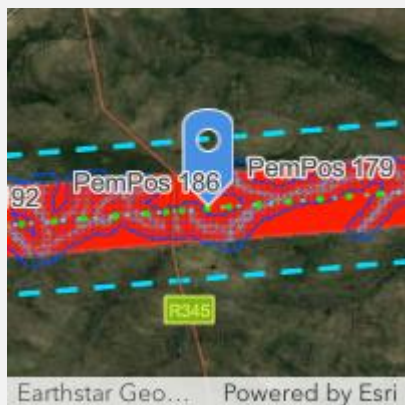




**Sampling Point Name:** PemPos 183

**Longitude:** 26.819546

**Latitude:** -32.864609



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 184

**Longitude:** 26.815661

**Latitude:** -32.864878

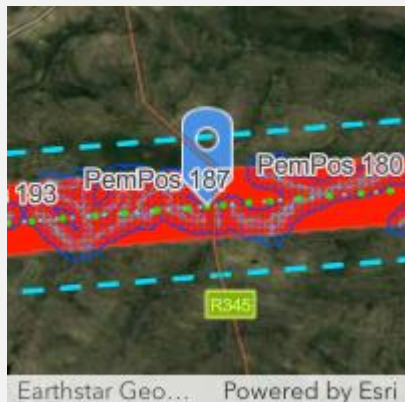




**Sampling Point Name:** PemPos 185

**Longitude:** 26.813234

**Latitude:** -32.86508



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 186

**Longitude:** 26.810226

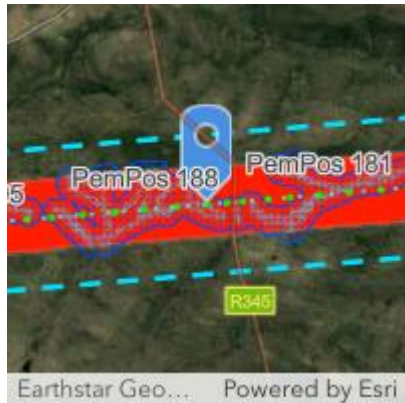
**Latitude:** -32.865284

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)





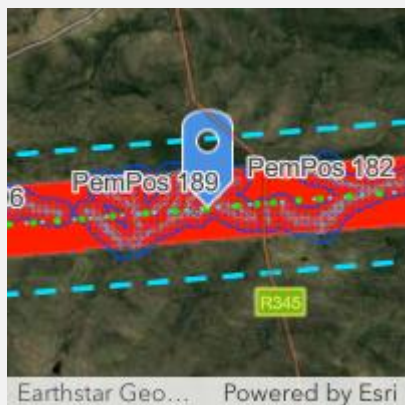
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 187

**Longitude:** 26.805581

**Latitude:** -32.86563



Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

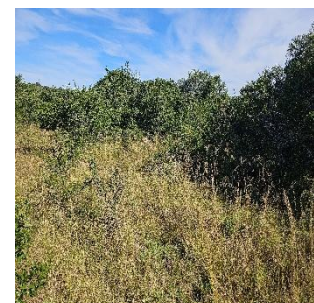
Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)

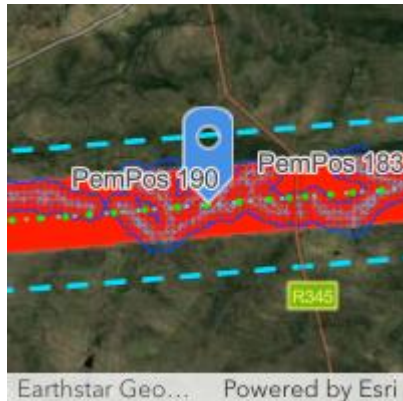
**Sampling Point Name:** PemPos 188

**Longitude:** 26.800651

**Latitude:** -32.865907







**Sampling Point Name:** PemPos 189

**Longitude:** 26.796084

**Latitude:** -32.866282



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 190

**Longitude:** 26.79131

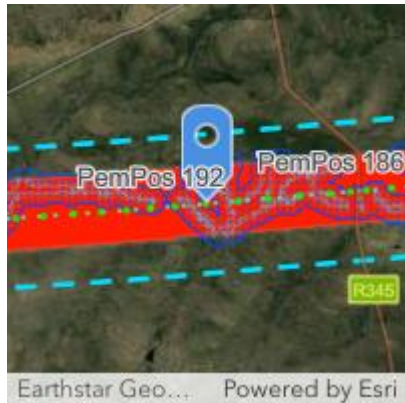
**Latitude:** -32.866706

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)





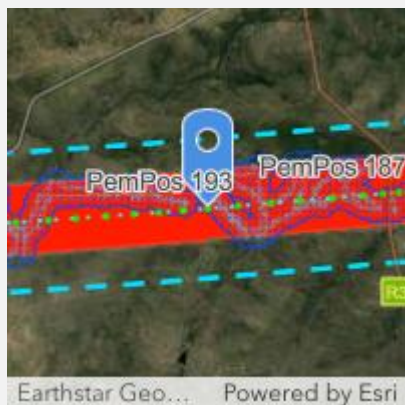
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 191

**Longitude:** 26.786319

**Latitude:** -32.866955



Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



Findings: No specific  
ecological constraints  
were recorded.

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked) .

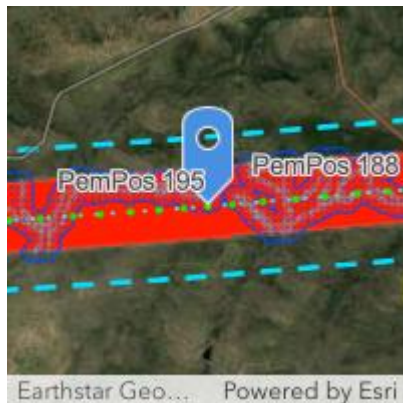
**Sampling Point Name:** PemPos 192

**Longitude:** 26.782536

**Latitude:** -32.867225



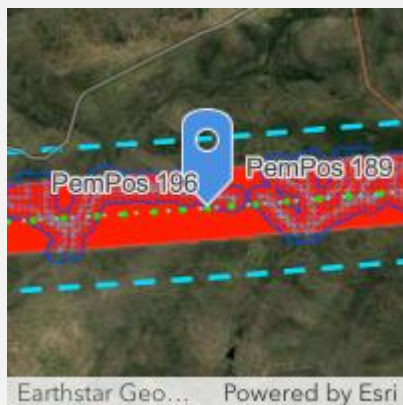




**Sampling Point Name:** PemPos 193

**Longitude:** 26.778912

**Latitude:** -32.867503



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



Findings: No specific ecological constraints were recorded.

Sensitivity: High

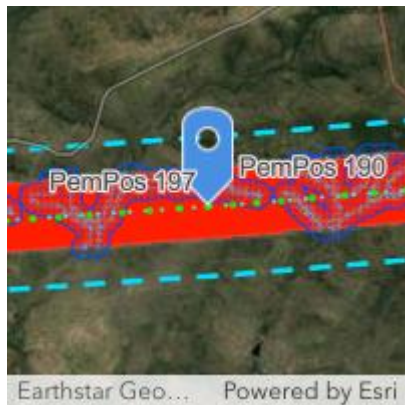
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

**Sampling Point Name:** PemPos 194

**Longitude:** 26.775004

**Latitude:** -32.867689





**Sampling Point Name:** PemPos 195

**Longitude:** 26.770868

**Latitude:** -32.867989



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



Findings: No specific ecological constraints were recorded.

Sensitivity: High

**Sampling Point Name:** PemPos 196

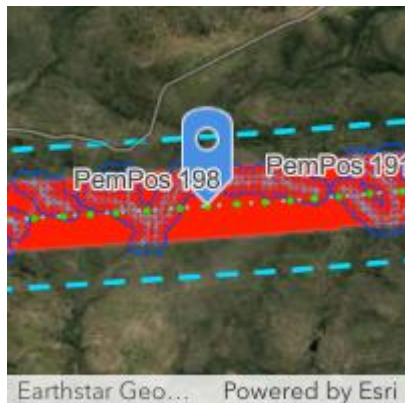
**Longitude:** 26.766205

**Latitude:** -32.868241

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



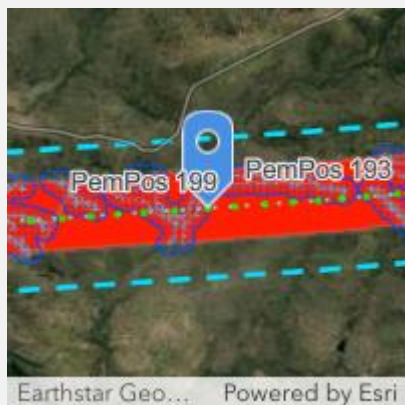




**Sampling Point Name:** PemPos 197

**Longitude:** 26.76196

**Latitude:** -32.868491



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

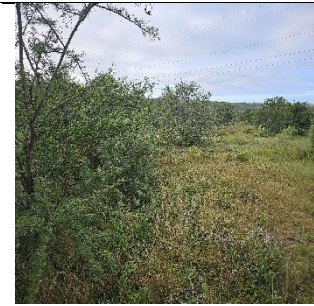
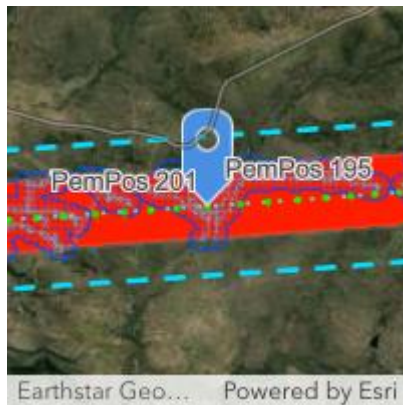
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)

**Sampling Point Name:** PemPos 198

**Longitude:** 26.756913

**Latitude:** -32.868795

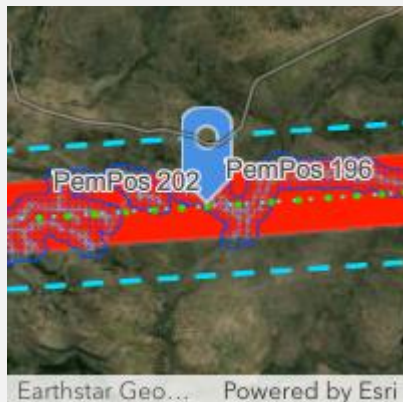




**Sampling Point Name:** PemPos 199

**Longitude:** 26.752185

**Latitude:** -32.869044



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

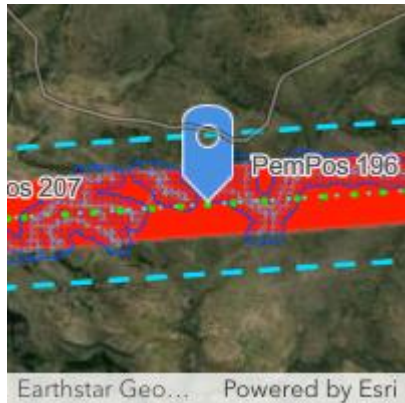
**Sampling Point Name:** PemPos 200

**Longitude:** 26.748208

**Latitude:** -32.869249







**Sampling Point Name:** PemPos 200-210

Findings: No specific ecological constraints were recorded.

Sensitivity: High

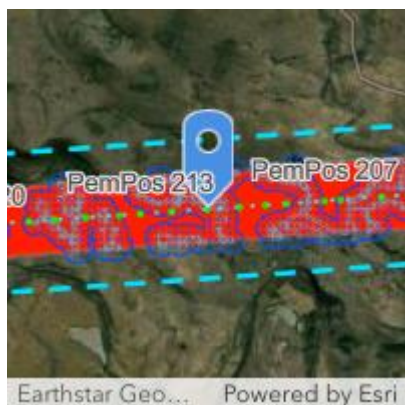
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

Not assessed

**Sampling Point Name:** PemPos 211

**Longitude:** 26.699709

**Latitude:** -32.872137



Findings: No specific ecological constraints were recorded.

Sensitivity: High

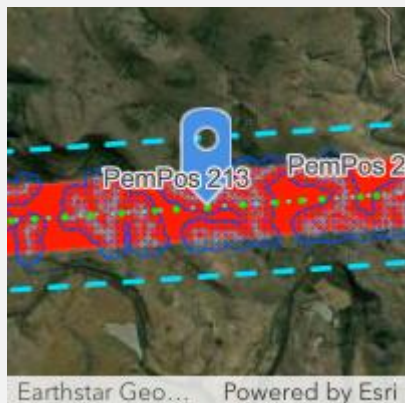
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 212

**Longitude:** 26.694178

**Latitude:** -32.872461



Findings: No specific ecological constraints were recorded.

Sensitivity: High

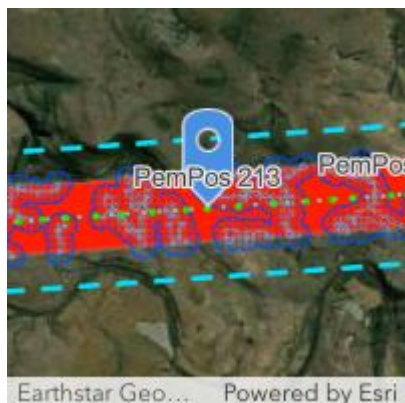
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 213

**Longitude:** 26.689444

**Latitude:** -32.872715



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 214

**Longitude:** 26.686191

**Latitude:** -32.872898

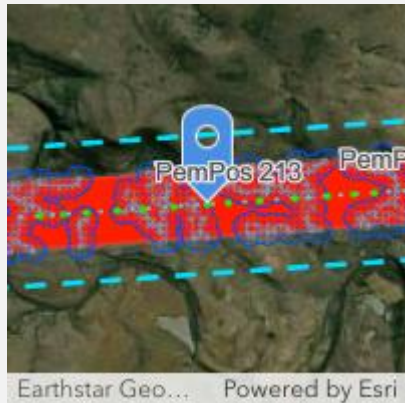
Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of







the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



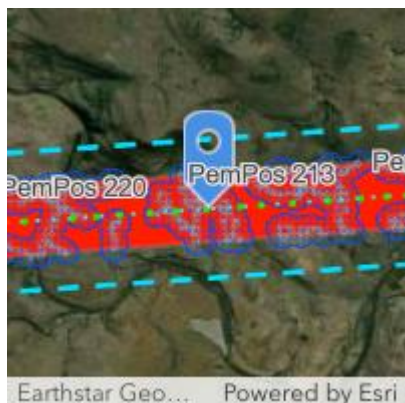
**Sampling Point Name:** PemPos 215

**Longitude:** 26.681157

**Latitude:** -32.87312

Findings: No specific ecological constraints were recorded.

Sensitivity: High



Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .

:



**Sampling Point Name:** PemPos 216

**Longitude:** 26.676343

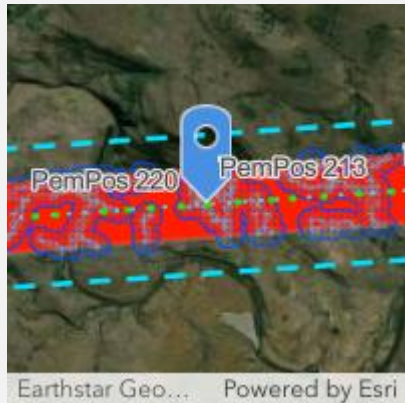
**Latitude:** -32.873474

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .





**Sampling Point Name:** PemPos 217

**Longitude:** 26.672387

**Latitude:** -32.873726

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 218

**Longitude:** 26.667741

**Latitude:** -32.873987

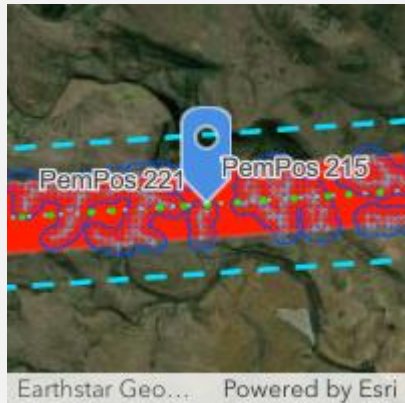
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .







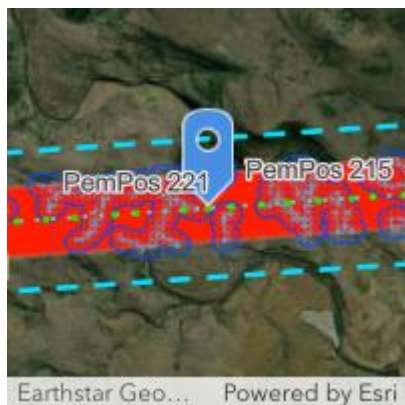
**Sampling Point Name:** PemPos 219

**Longitude:** 26.664059

**Latitude:** -32.874188

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High



**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 220

**Longitude:** 26.660532

**Latitude:** -32.874429

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .





**Sampling Point Name:** PemPos 221

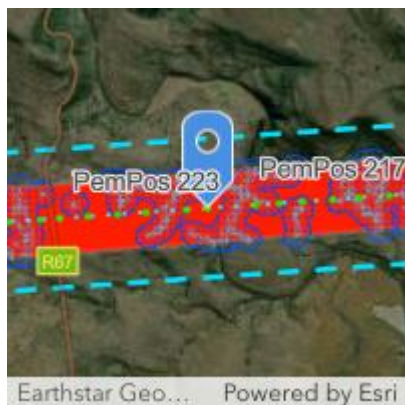
**Longitude:** 26.653144

**Latitude:** -32.874841

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 222

**Longitude:** 26.649852

**Latitude:** -32.875087

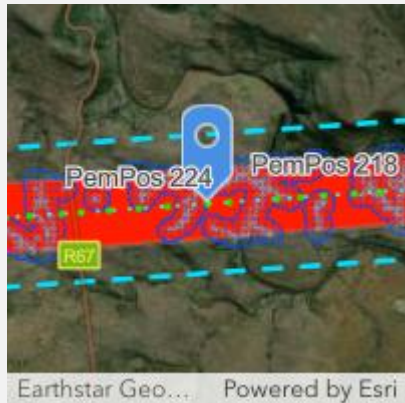
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .







**Sampling Point Name:** PemPos 223

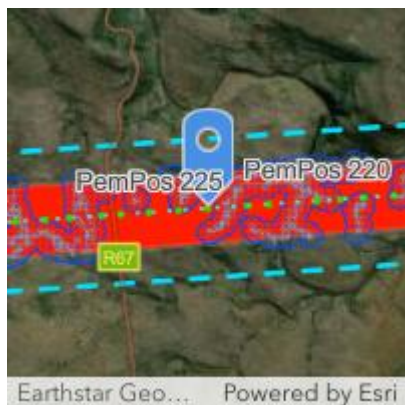
**Longitude:** 26.643765

**Latitude:** -32.875358

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 224

**Longitude:** 26.639321

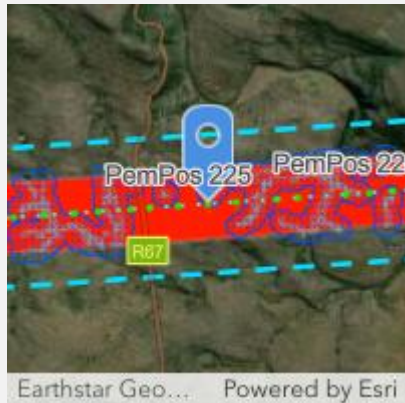
**Latitude:** -32.875668

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .





**Sampling Point Name:** PemPos 225

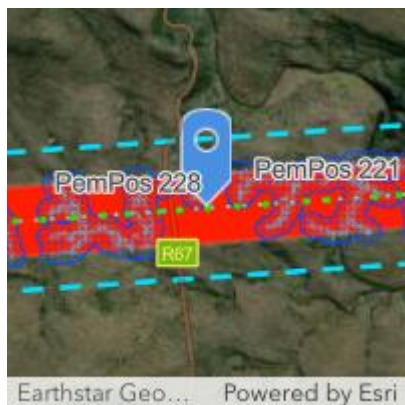
**Longitude:** 26.634785

**Latitude:** -32.875898

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 226

**Longitude:** 26.630465

**Latitude:** -32.876103

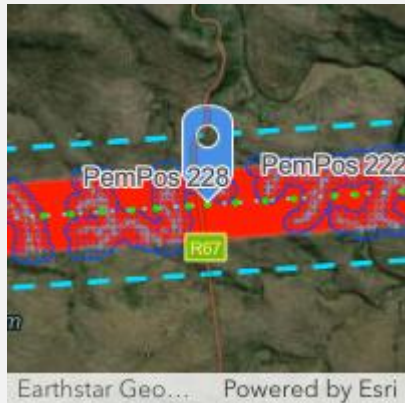
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



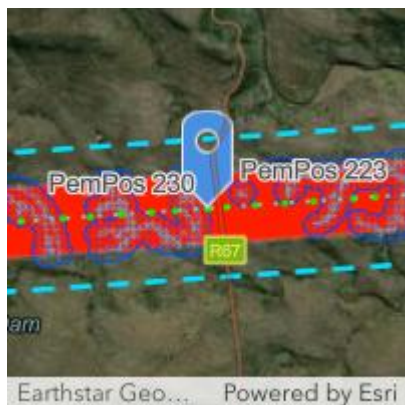




**Sampling Point Name:** PemPos 227

**Longitude:** 26.627477

**Latitude:** -32.876286



**Sampling Point Name:** PemPos 228

**Longitude:** 26.622523

**Latitude:** -32.876599

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)





marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 229

**Longitude:** 26.618935

**Latitude:** -32.876826

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 230

**Longitude:** 26.614281

**Latitude:** -32.877069

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans







marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 231

**Longitude:** 26.609562

**Latitude:** -32.877374

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 232

**Longitude:** 26.605352

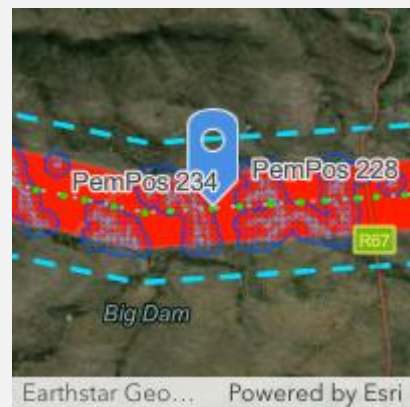
**Latitude:** -32.877608

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans





marked, 8 spans  
unmarked)

:



**Sampling Point Name:** PemPos 233

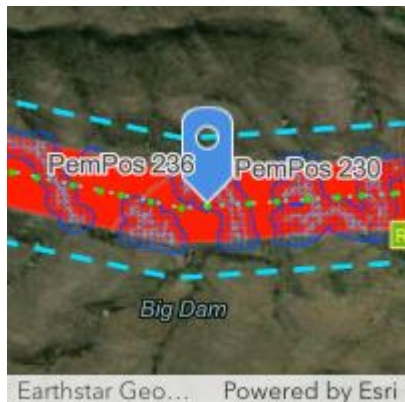
**Longitude:** 26.59896

**Latitude:** -32.877953

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 234

**Longitude:** 26.594992

**Latitude:** -32.878164

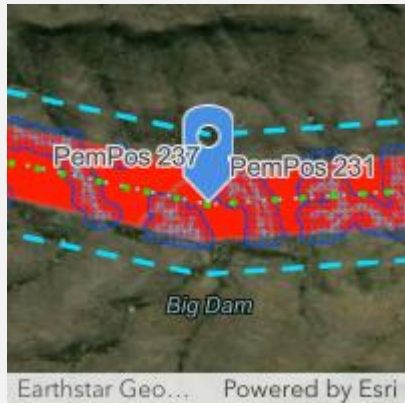
Findings: No specific  
ecological constraints  
were recorded.

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked) .







**Sampling Point Name:** PemPos 235

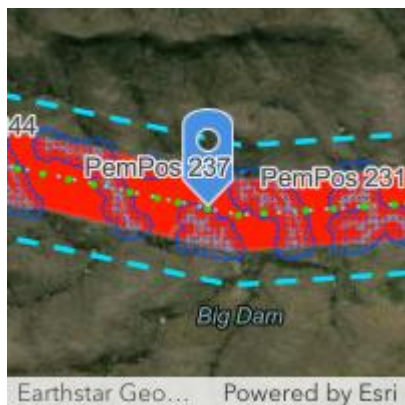
**Longitude:** 26.590246

**Latitude:** -32.877308

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 236

**Longitude:** 26.585747

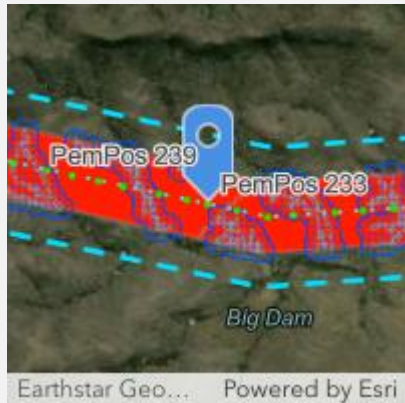
**Latitude:** -32.87655

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .





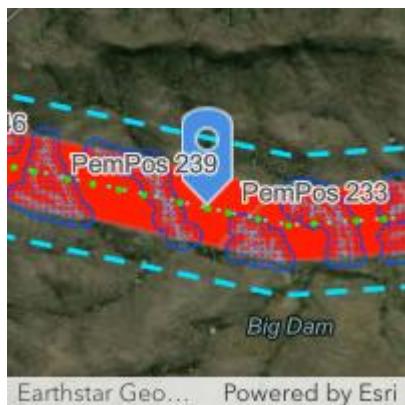
**Sampling Point Name:** PemPos 237

**Longitude:** 26.582547

**Latitude:** -32.875981

Fin Findings: No specific ecological constraints were recorded.

Sensitivity: High



Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .



**Sampling Point Name:** PemPos 238

**Longitude:** 26.578307

**Latitude:** -32.875224

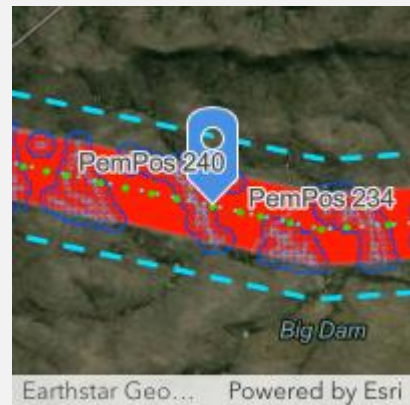
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)







**Sampling Point Name:** PemPos 239

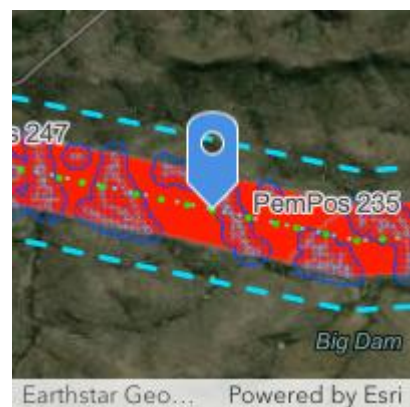
**Longitude:** 26.572839

**Latitude:** -32.874278

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 240

**Longitude:** 26.568931

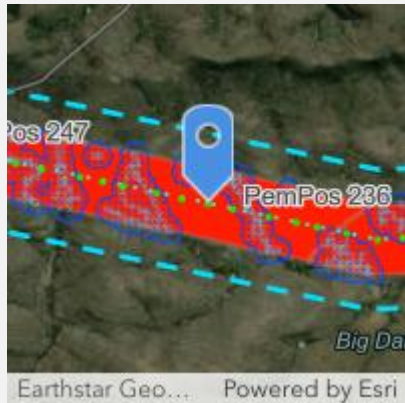
**Latitude:** -32.873624

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) .





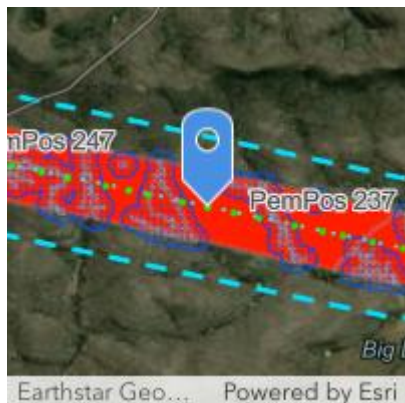
Findings: No specific ecological constraints were recorded.

Sensitivity: High

**Sampling Point Name:** PemPos 241

**Longitude:** 26.564951

**Latitude:** -32.87288



Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) onstruction and mitigation. Should hotspots emerge during the one-year postconstruction study NTCSA will mark the identified spans if they happen to be part of the unmarked spans within 365 days of receiving the specialist report. This is to be completed by a SACNASP-registered avifauna specialist.

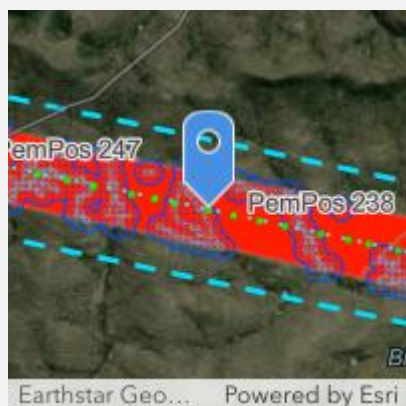




**Sampling Point Name:** PemPos 242

**Longitude:** 26.561133

**Latitude:** -32.872199



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

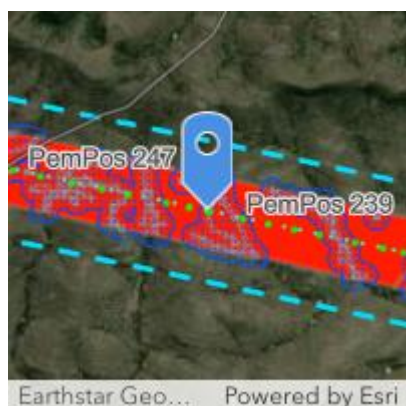
Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 243

**Longitude:** 26.555833

**Latitude:** -32.87122



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 244

**Longitude:** 26.552818

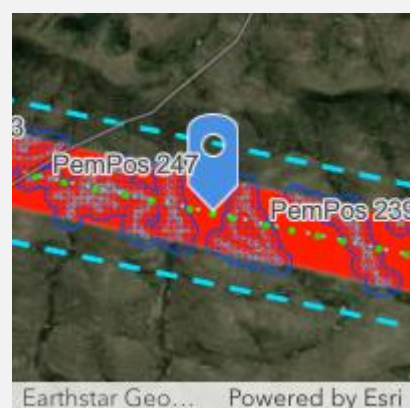
**Latitude:** -32.870665

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that





NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 245

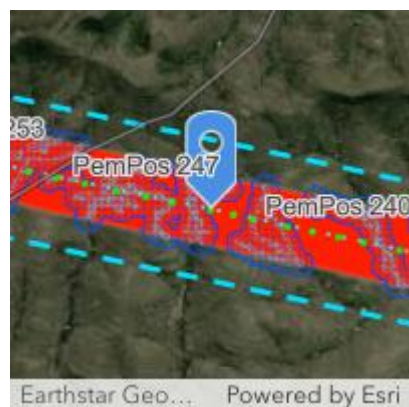
**Longitude:** 26.549365

**Latitude:** -32.870112

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 246

**Longitude:** 26.543547

**Latitude:** -32.869032

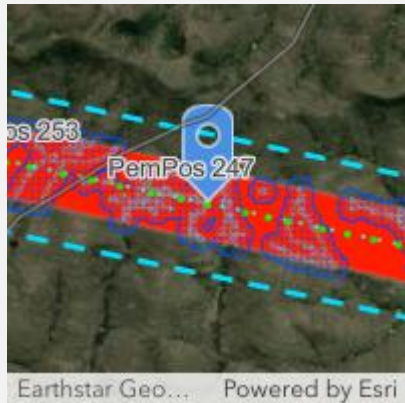
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)







**Sampling Point Name:** PemPos 247

**Longitude:** 26.539449

**Latitude:** -32.868369

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 248

**Longitude:** 26.534935




**Latitude:** -32.867535

Findings: No specific ecological constraints were recorded, but near water resources

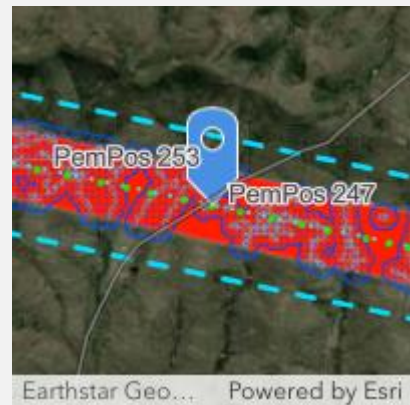
Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



	<p>marked, 8 spans unmarked)</p>	
<p><b>Sampling Point Name:</b> PemPos 249</p> <p><b>Longitude:</b> 26.530046 <b>Latitude:</b> -32.866654</p> 	<p>Findings: No specific ecological constraints were recorded, but near water resources</p> <p>Sensitivity: High</p> <p>Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)</p>	 
<p><b>Sampling Point Name:</b> PemPos 250</p> <p><b>Longitude:</b> 26.525824 <b>Latitude:</b> -32.865958</p>	<p>Findings: No specific ecological constraints were recorded, but near water resources</p> <p>Sensitivity: High</p> <p>Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans</p>	





marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 251

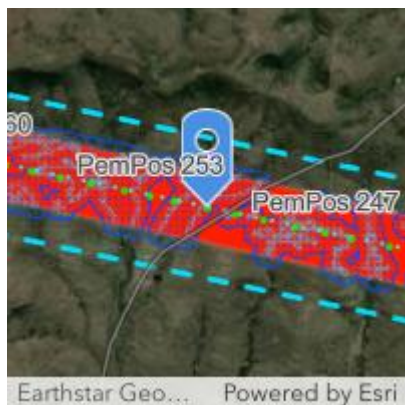
**Longitude:** 26.521463

**Latitude:** -32.865174

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)



**Sampling Point Name:** PemPos 252

**Longitude:** 26.516319

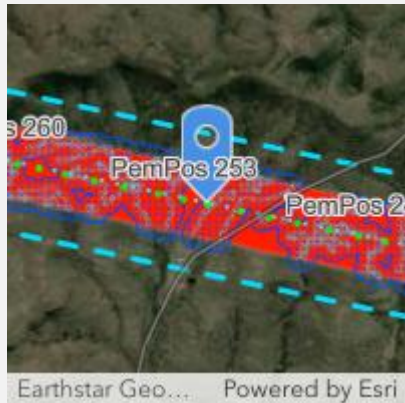
**Latitude:** -32.864248

Findings: No specific  
ecological constraints  
were recorded, but near  
water resources

Sensitivity: High

Recommendations: It is  
recommended that  
NTCSA mark one-third of  
the line with nocturnal  
BFDs in an experimental  
block design (a repeating  
pattern of 4 spans  
marked, 8 spans  
unmarked)





**Sampling Point Name:** PemPos 253

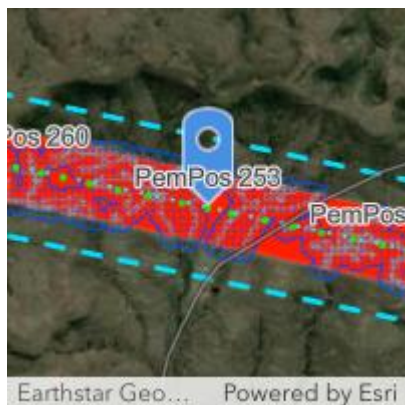
**Longitude:** 26.512648

**Latitude:** -32.863581

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 254

**Longitude:** 26.508652

**Latitude:** -32.862871

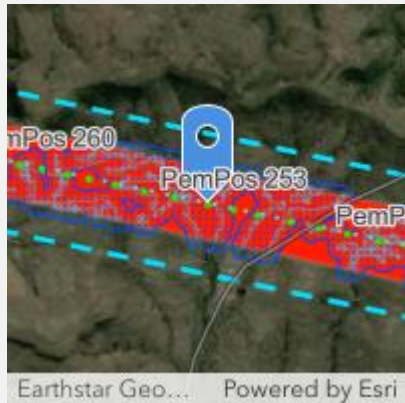
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)







**Sampling Point Name:** PemPos 255

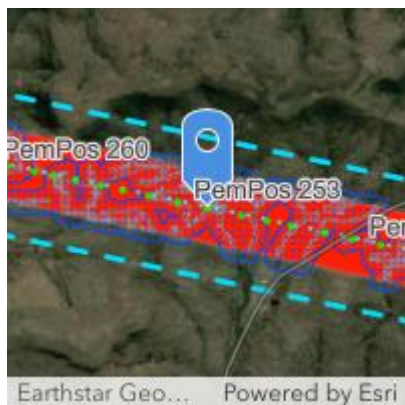
**Longitude:** 26.50352

**Latitude:** -32.861979

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 256

**Longitude:** 26.498883

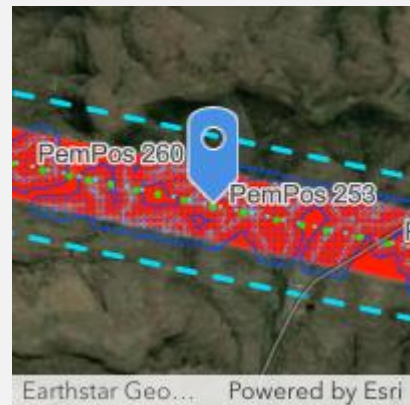
**Latitude:** -32.861149

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)





**Sampling Point Name:** PemPos 257

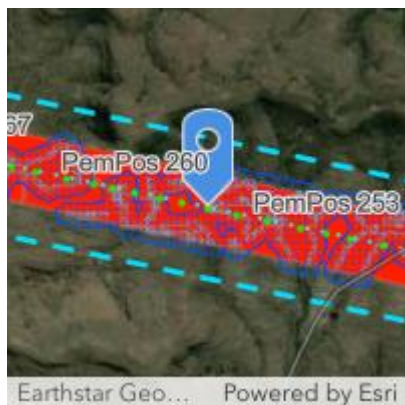
**Longitude:** 26.494457

**Latitude:** -32.860308

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 258

**Longitude:** 26.490485

**Latitude:** -32.85964

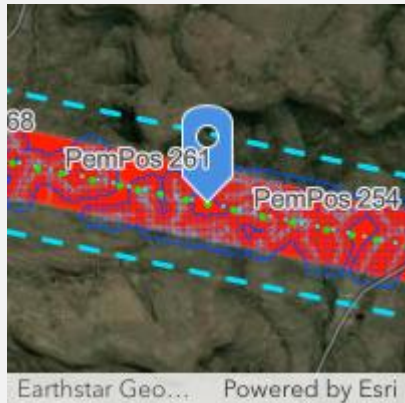
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)







**Sampling Point Name:** PemPos 267

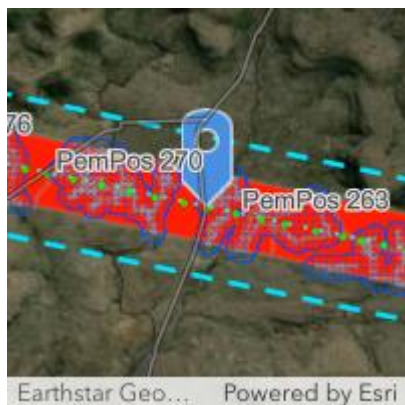
**Longitude:** 26.456249

**Latitude:** -32.853579

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 268

**Longitude:** 26.452643

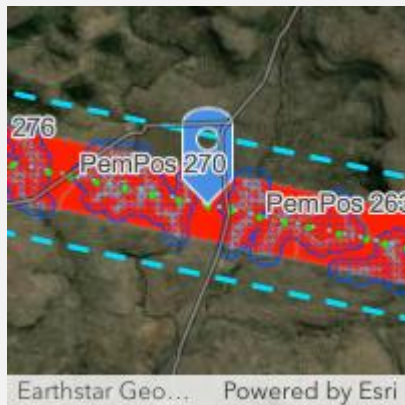
**Latitude:** -32.852936

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)





**Sampling Point Name:** PemPos 269

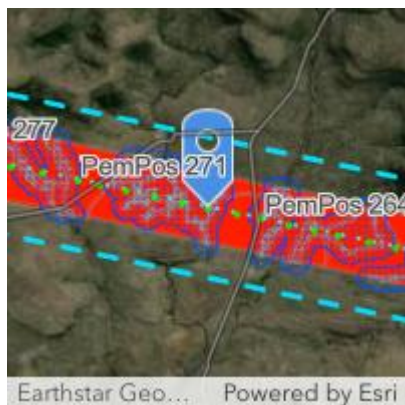
**Longitude:** 26.448127

**Latitude:** -32.852133

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked)



**Sampling Point Name:** PemPos 270

**Longitude:** 26.44426

**Latitude:** -32.851434

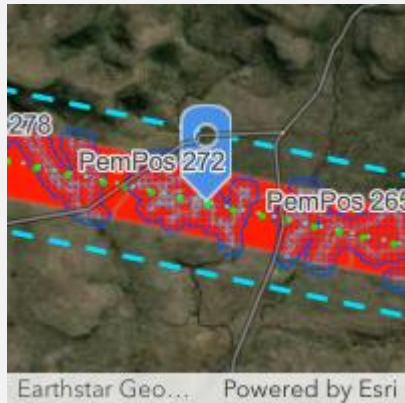
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 271

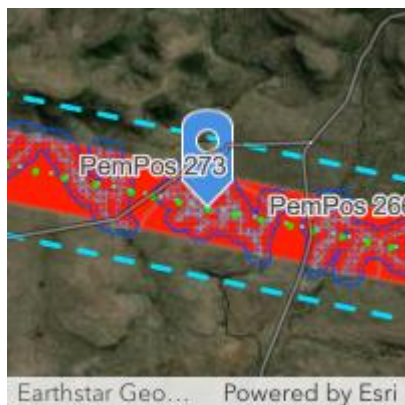
**Longitude:** 26.439969

**Latitude:** -32.850651

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 272

**Longitude:** 26.435653

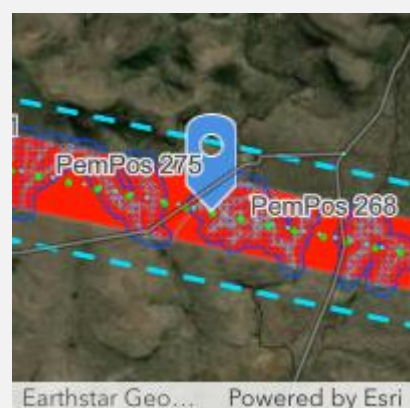
**Latitude:** -32.849877

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 273

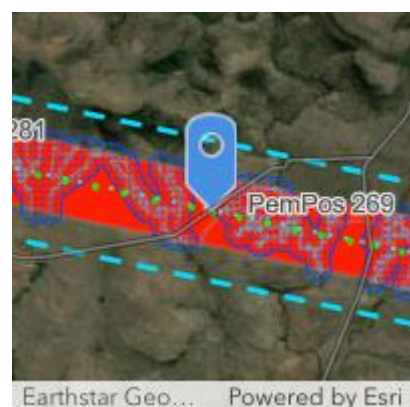
**Longitude:** 26.431548

**Latitude:** -32.849216

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 274

**Longitude:** 26.428306

**Latitude:** -32.848645

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 275

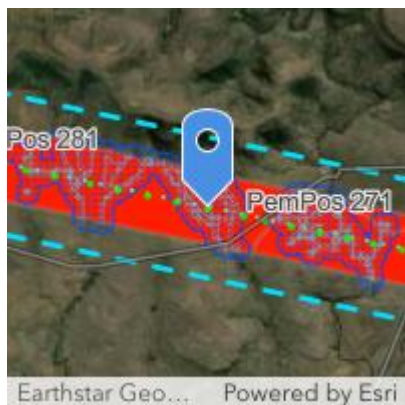
**Longitude:** 26.422782

**Latitude:** -32.84756

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 276

**Longitude:** 26.418015

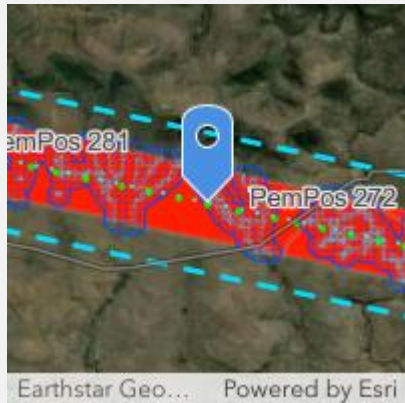
**Latitude:** -32.846749

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 277

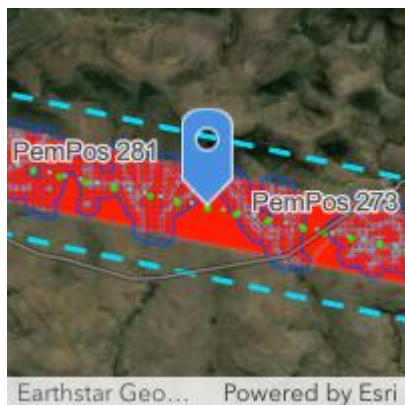
**Longitude:** 26.413612

**Latitude:** -32.845983

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 278

**Longitude:** 26.409039

**Latitude:** -32.845147

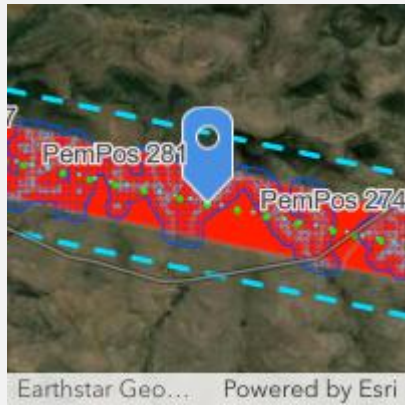
Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 279

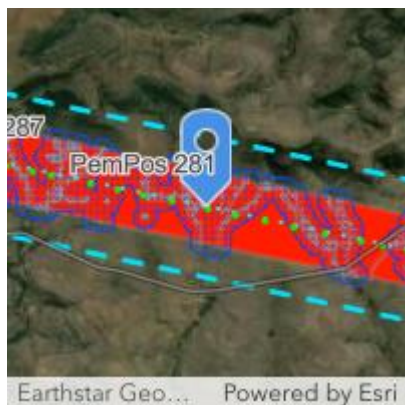
**Longitude:** 26.404779

**Latitude:** -32.844358

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 280

**Longitude:** 26.399322

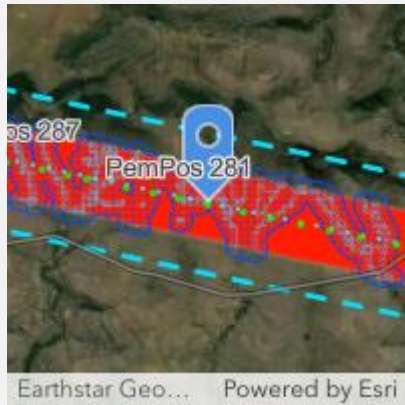
**Latitude:** -32.84338

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 281

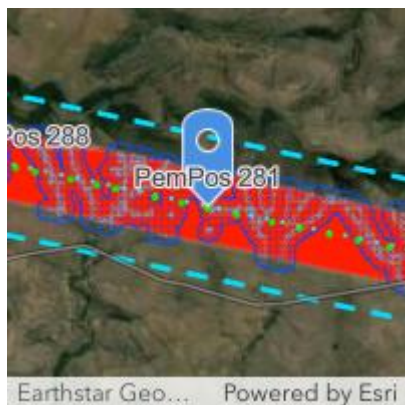
**Longitude:** 26.394925

**Latitude:** -32.842641

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 282

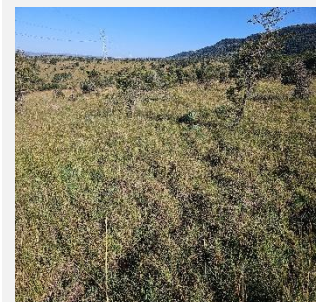
**Longitude:** 26.391035

**Latitude:** -32.841941

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 283

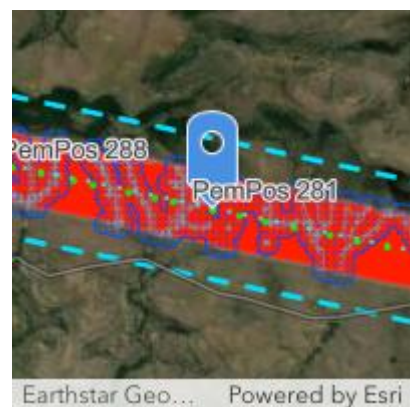
**Longitude:** 26.386825

**Latitude:** -32.8412

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 284

**Longitude:** 26.380814

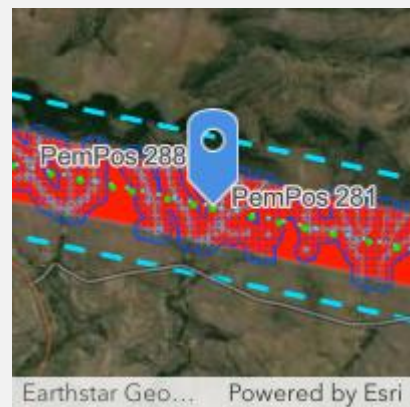
**Latitude:** -32.840107

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 285

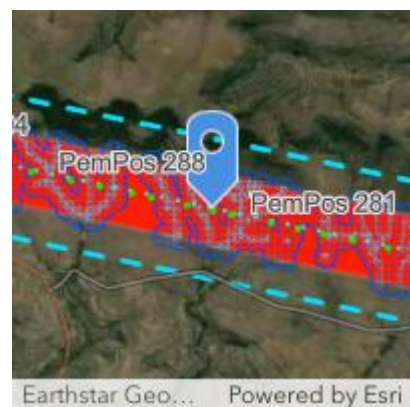
**Longitude:** 26.377881

**Latitude:** -32.839577

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 286

**Longitude:** 26.373932

**Latitude:** -32.838996

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 287

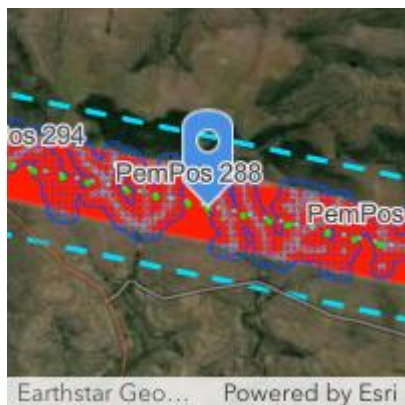
**Longitude:** 26.368481

**Latitude:** -32.837959

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 288

**Longitude:** 26.365535

**Latitude:** -32.837422

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 289

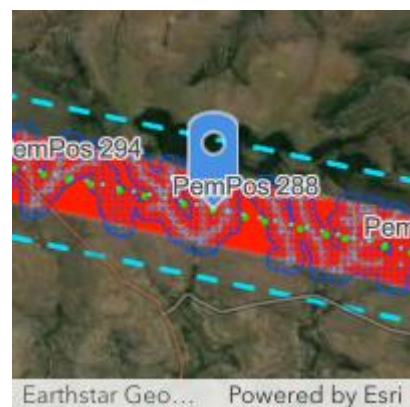
**Longitude:** 26.360509

**Latitude:** -32.836502

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 290

**Longitude:** 26.356006

**Latitude:** -32.835713

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 291

**Longitude:** 26.350151

**Latitude:** -32.834653

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 292

**Longitude:** 26.346278

**Latitude:** -32.83393

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 293

**Longitude:** 26.341883

**Latitude:** -32.833139

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 294

**Longitude:** 26.338387

**Latitude:** -32.832544

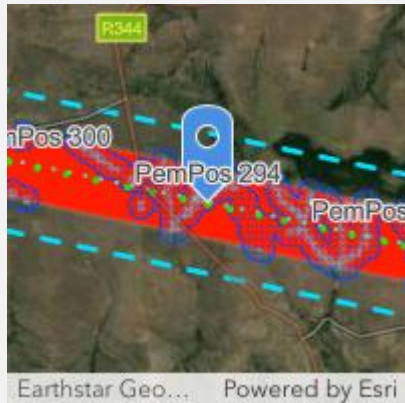
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 295

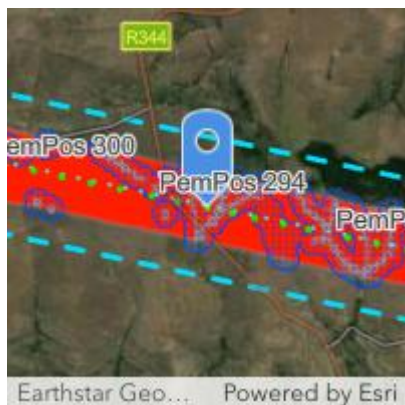
**Longitude:** 26.334641

**Latitude:** -32.831921

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 296

**Longitude:** 26.33007

**Latitude:** -32.831021

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 297

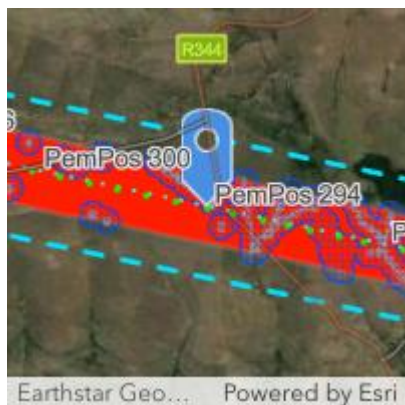
**Longitude:** 26.326116

**Latitude:** -32.830323

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 298

**Longitude:** 26.32129

**Latitude:** -32.829461

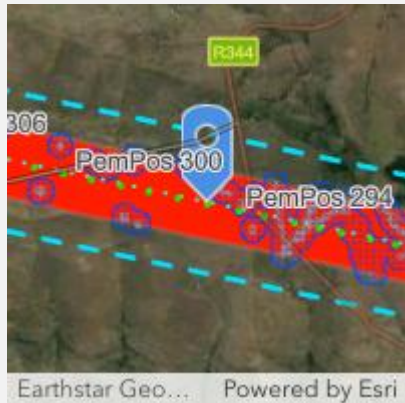
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 299

**Longitude:** 26.31672

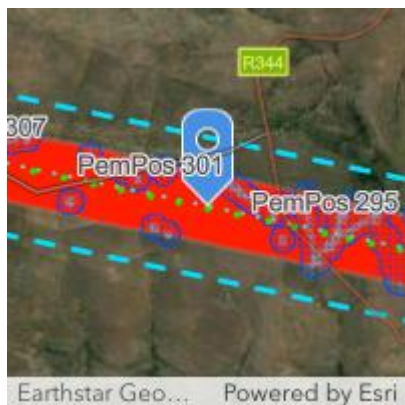
**Latitude:** -32.828645

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:



**Sampling Point Name:** PemPos 300

**Longitude:** 26.312304

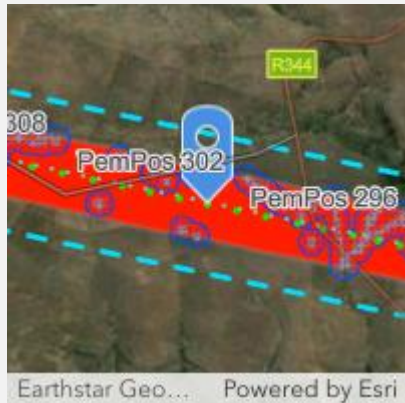
**Latitude:** -32.827851

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 301

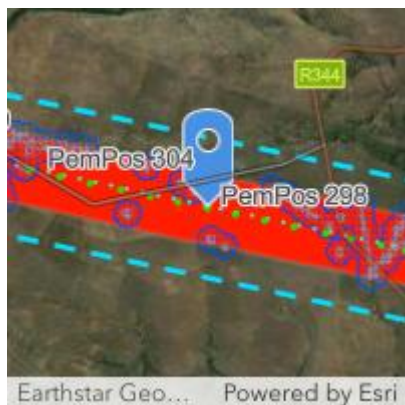
**Longitude:** 26.308026

**Latitude:** -32.827088

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 302

**Longitude:** 26.303463

**Latitude:** -32.826242

Findings: No specific ecological constraints were recorded.

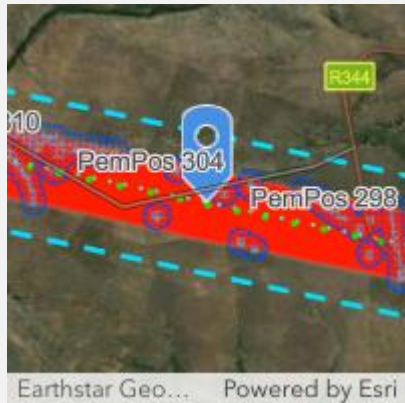
Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

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**Sampling Point Name:** PemPos 303

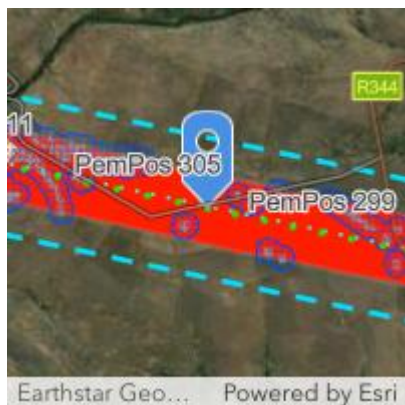
**Longitude:** 26.299232

**Latitude:** -32.825511

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 304

**Longitude:** 26.294762

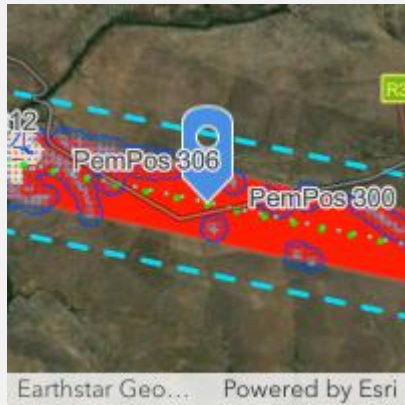
**Latitude:** -32.824682

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 305

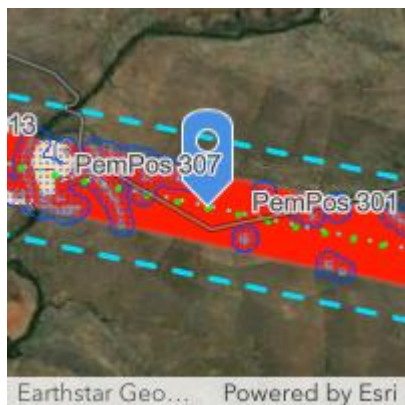
**Longitude:** 26.289963

**Latitude:** -32.823855

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 306

**Longitude:** 26.285351

**Latitude:** -32.822977

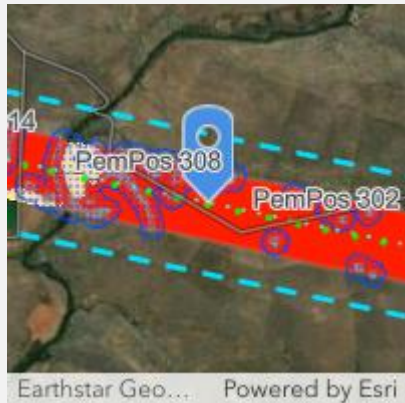
Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 307

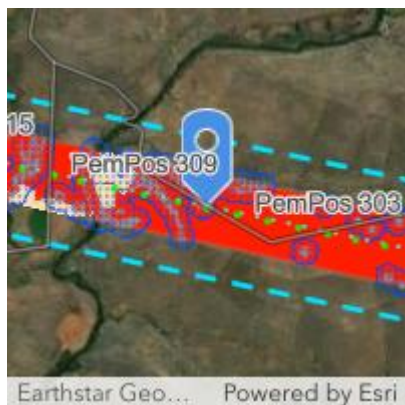
**Longitude:** 26.280812

**Latitude:** -32.822213

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 308

**Longitude:** 26.276207

**Latitude:** -32.821361

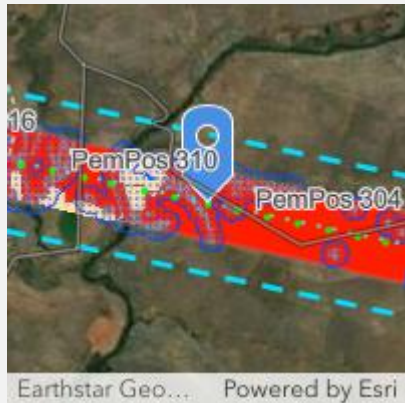
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:





**Sampling Point Name:** PemPos 309

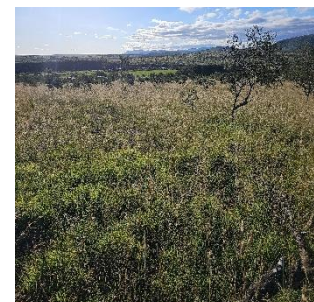
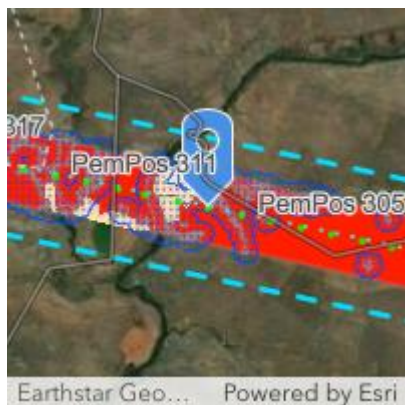
**Longitude:** 26.271019

**Latitude:** -32.820484

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 310

**Longitude:** 26.266531

**Latitude:** -32.819635

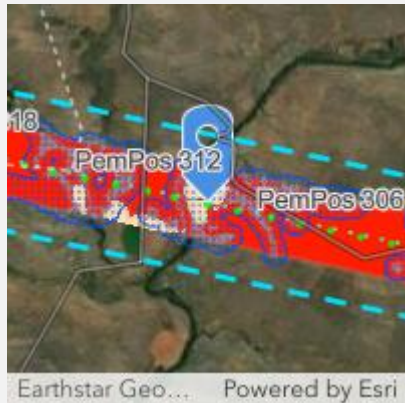
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 311

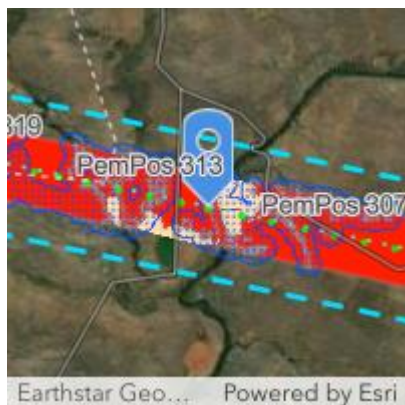
**Longitude:** 26.261319

**Latitude:** -32.818677

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 312

**Longitude:** 26.257404

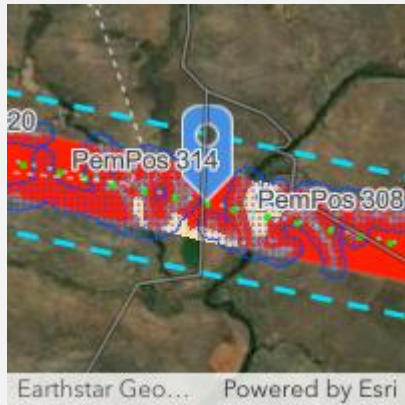
**Latitude:** -32.817985

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 313

**Longitude:** 26.252422

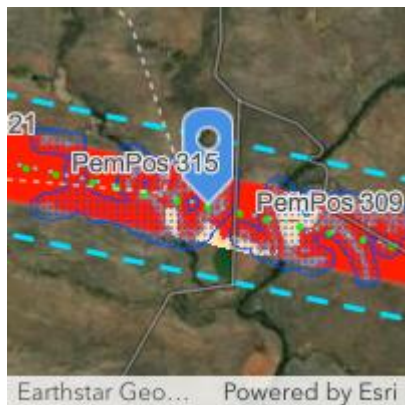
**Latitude:** -32.81711

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:



**Sampling Point Name:** PemPos 314

**Longitude:** 26.247807

**Latitude:** -32.816292

Findings: No specific ecological constraints were recorded, but near water resources

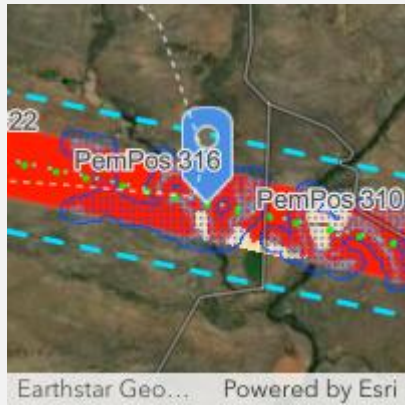
Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:







**Sampling Point Name:** PemPos 315

**Longitude:** 26.242775

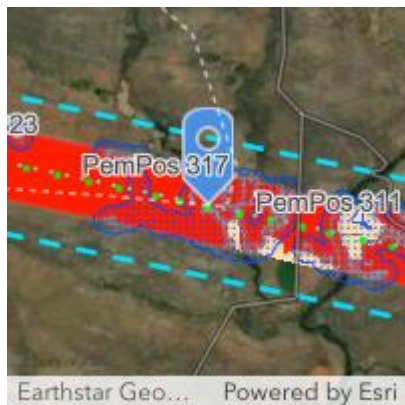
**Latitude:** -32.815366

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

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**Sampling Point Name:** PemPos 316

**Longitude:** 26.238572

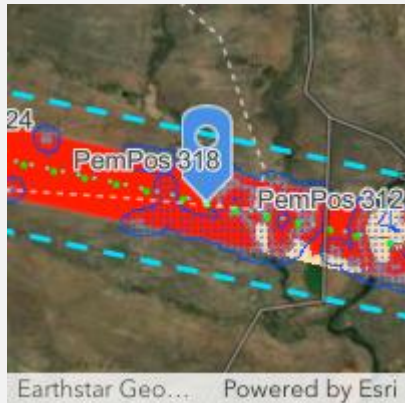
**Latitude:** -32.814617

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 317

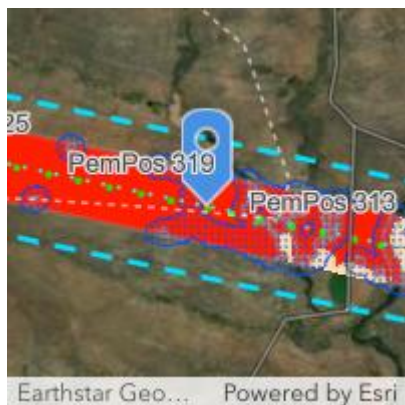
**Longitude:** 26.234789

**Latitude:** -32.81392

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 318

**Longitude:** 26.229208

**Latitude:** -32.812904

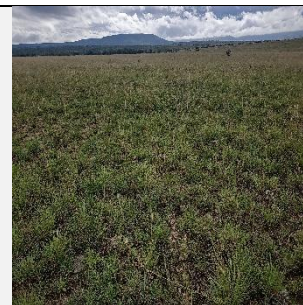
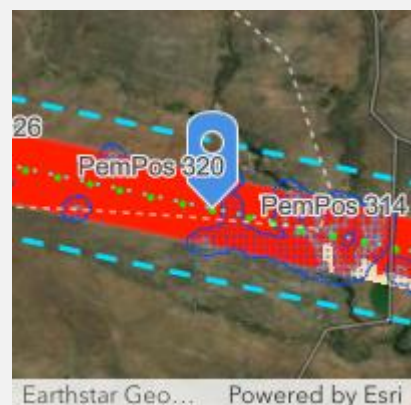
Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 319

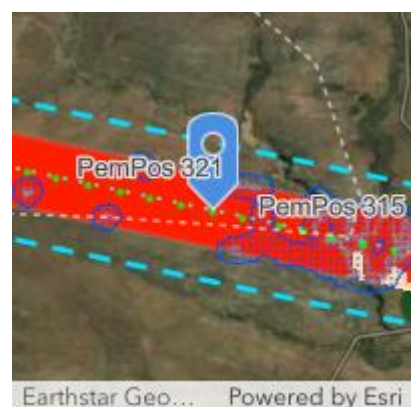
**Longitude:** 26.224595

**Latitude:** -32.812137

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 320

**Longitude:** 26.21976

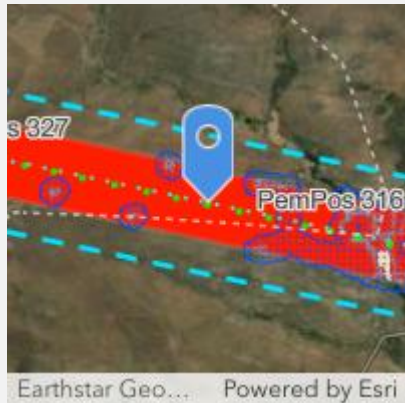
**Latitude:** -32.811193

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 321

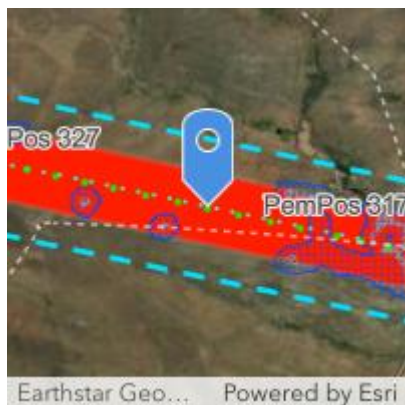
**Longitude:** 26.215011

**Latitude:** -32.810359

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 322

**Longitude:** 26.210451

**Latitude:** -32.809629

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 323

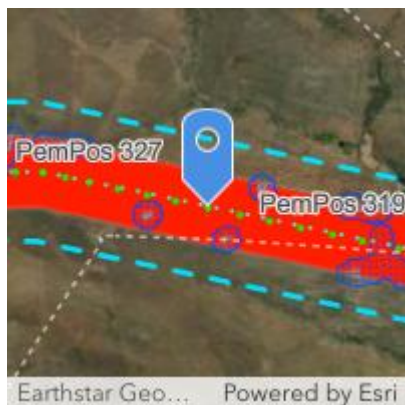
**Longitude:** 26.205468

**Latitude:** -32.80871

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 324

**Longitude:** 26.200552

**Latitude:** -32.80777

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 325

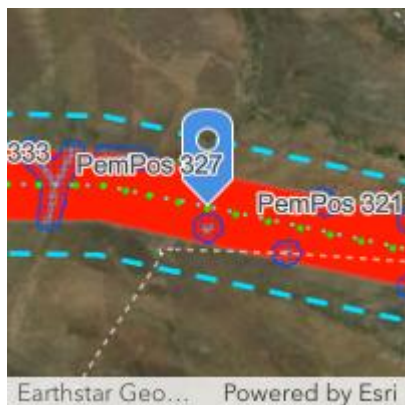
**Longitude:** 26.196213

**Latitude:** -32.806984

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 326

**Longitude:** 26.19168

**Latitude:** -32.80621

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 327

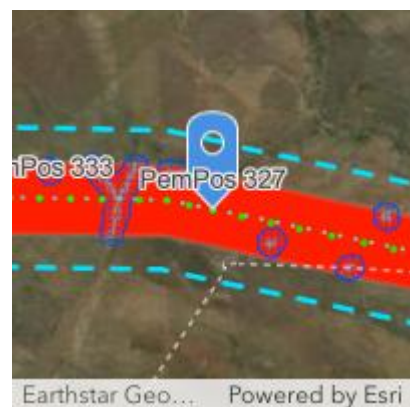
**Longitude:** 26.187262

**Latitude:** -32.805376

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 328

**Longitude:** 26.183676

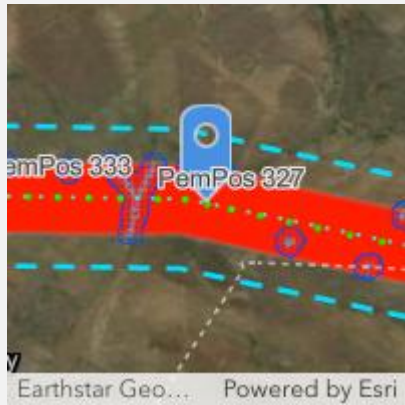
**Latitude:** -32.804719

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 329

**Longitude:** 26.180242

**Latitude:** -32.804104

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 330

**Longitude:** 26.176048

**Latitude:** -32.80404

**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 331

**Longitude:** 26.170298

**Latitude:** -32.803953

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 332

**Longitude:** 26.165526







**Latitude:** -32.803913

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Fit flight diverters as per industry standards



		
<p><b>Sampling Point Name:</b> PemPos 333</p> <p><b>Longitude:</b> 26.160782 <b>Latitude:</b> -32.803811</p> 	<p>Findings: No specific ecological constraints were recorded.</p> <p>Sensitivity: High</p> <p>Recommendations: Fit flight diverters as per industry standards</p>	 
<p><b>Sampling Point Name:</b> PemPos 334</p> <p><b>Longitude:</b> 26.156177 <b>Latitude:</b> -32.803761</p>	<p>Findings: No specific ecological constraints were recorded.</p> <p>Sensitivity: High</p> <p>Recommendations: Fit flight diverters as per industry standards</p>	

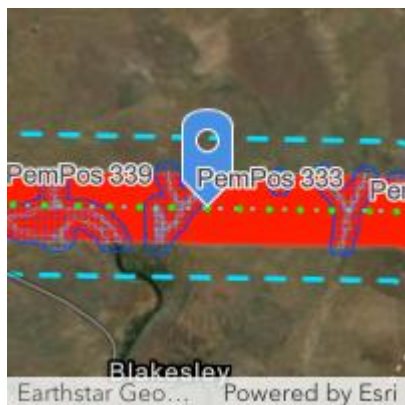




**Sampling Point Name:** PemPos 335

**Longitude:** 26.151265

**Latitude:** -32.803673



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Fit flight diverters as per industry standards



**Sampling Point Name:** PemPos 336

**Longitude:** 26.145773

**Latitude:** -32.803543

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 337

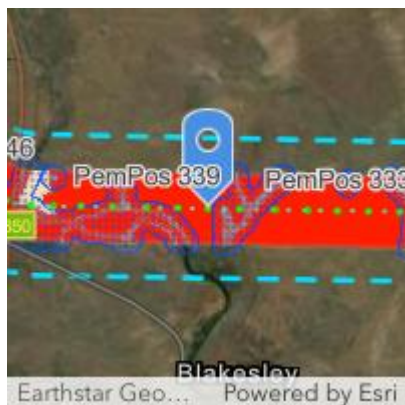
**Longitude:** 26.140836

**Latitude:** -32.803483

**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 338

**Longitude:** 26.136301

**Latitude:** -32.803407

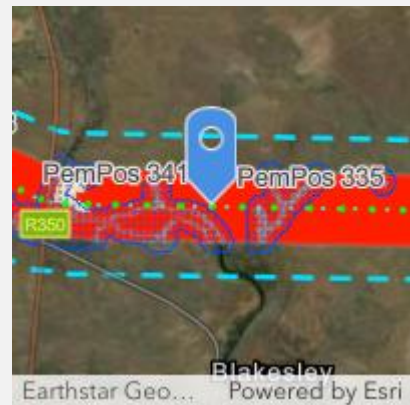
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 339

**Longitude:** 26.131581

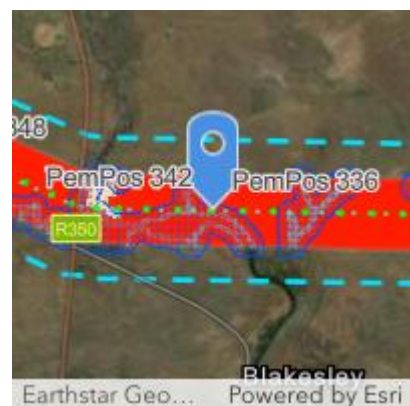
**Latitude:** -32.80333

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:



**Sampling Point Name:** PemPos 340

**Longitude:** 26.126232

**Latitude:** -32.803244

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:





**Sampling Point Name:** PemPos 341

**Longitude:** 26.121503

**Latitude:** -32.803179

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:



**Sampling Point Name:** PemPos 342

**Longitude:** 26.11722

**Latitude:** -32.803088

Findings: No specific ecological constraints were recorded, but near water resources

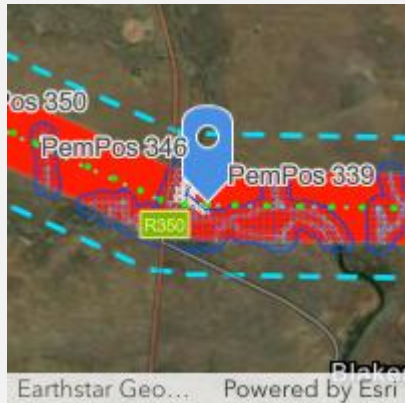
Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:



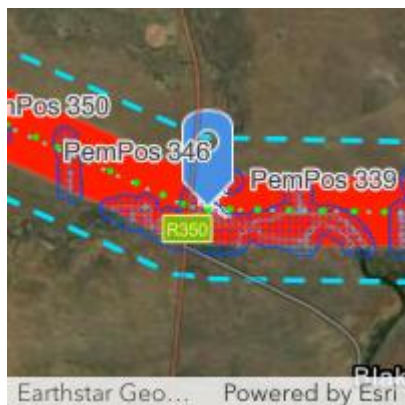




**Sampling Point Name:** PemPos 343

**Longitude:** 26.113772

**Latitude:** -32.803037



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 344

Findings: No specific ecological constraints were recorded, but near water resources

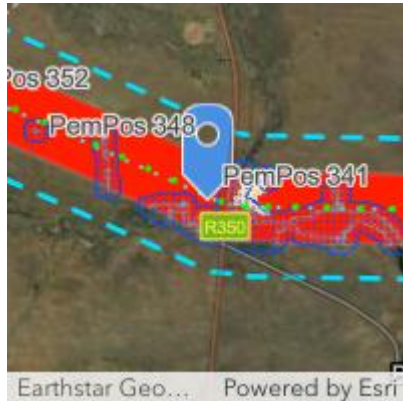
Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

**Sampling Point Name:** PemPos 345

**Longitude:** 26.107967

**Latitude:** -32.802695



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

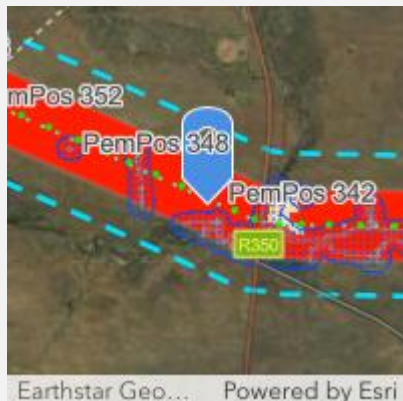
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 346

**Longitude:** 26.102822

**Latitude:** -32.800807



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 347

**Longitude:** 26.098239

**Latitude:** -32.79914

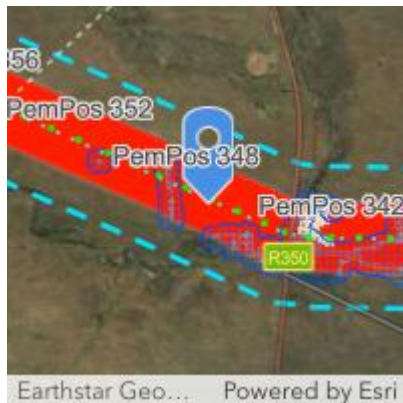
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m







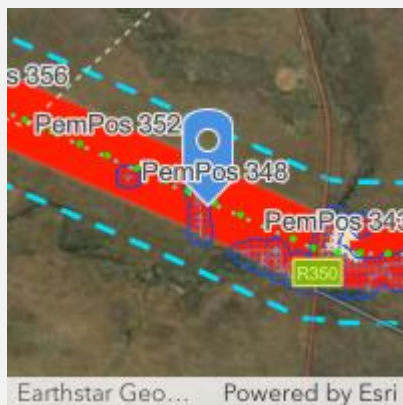
intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 348

**Longitude:** 26.093822

**Latitude:** -32.797397



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 350

**Longitude:** 26.084715

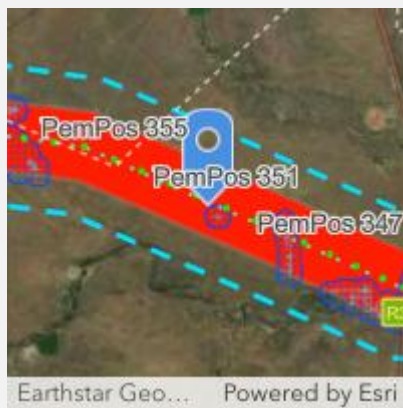
**Latitude:** -32.794028



**Sampling Point Name:** PemPos 351

**Longitude:** 26.080101

**Latitude:** -32.792281



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Sampling Point Name:** PemPos 352

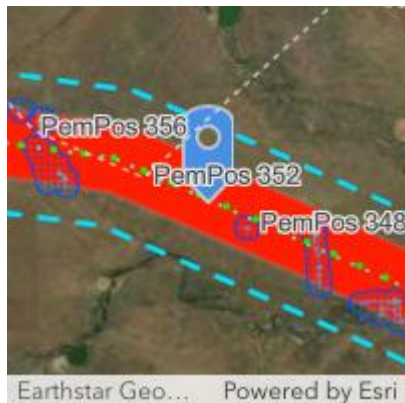
**Longitude:** 26.07557

**Latitude:** -32.79059

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



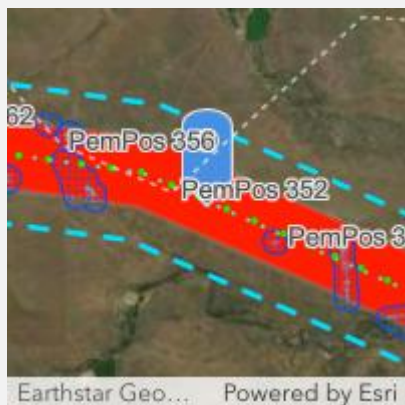




**Sampling Point Name:** PemPos 353

**Longitude:** 26.071323

**Latitude:** -32.78898



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



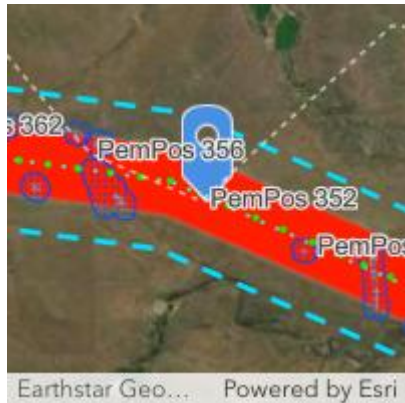
Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

:

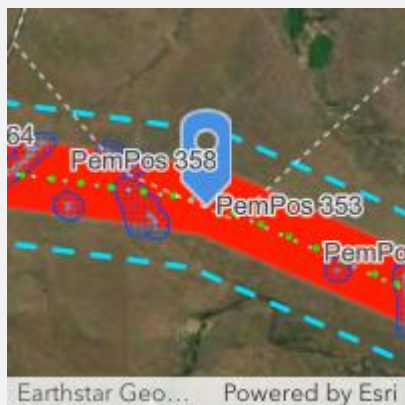




**Sampling Point Name:** PemPos 355

**Longitude:** 26.061789

**Latitude:** -32.785424



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

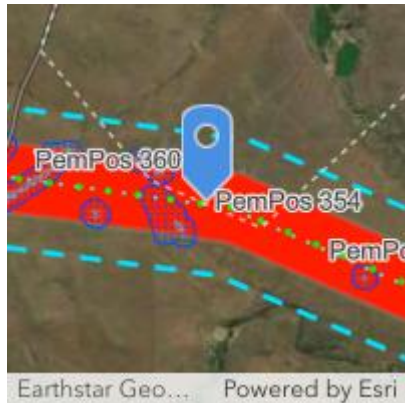


**Sampling Point Name:** PemPos 356

**Longitude:** 26.057644

**Latitude:** -32.783898

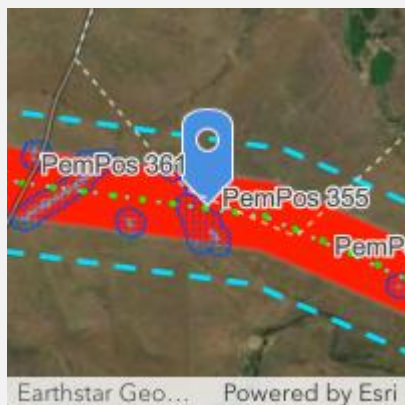




**Sampling Point Name:** PemPos 357

**Longitude:** 26.052337

**Latitude:** -32.783304



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Sampling Point Name:** PemPos 357

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

No Photos

**Sampling Point Name:** PemPos 359

**Longitude:** 26.046901

**Latitude:** -32.782658



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

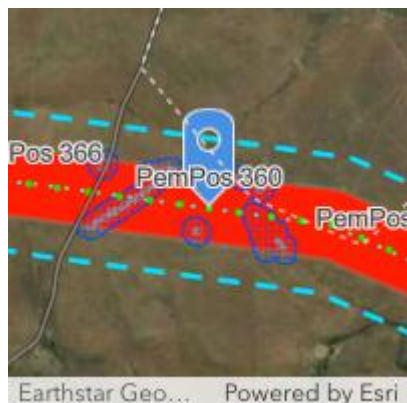
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 360

**Longitude:** 26.042339

**Latitude:** -32.782165



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 361

**Longitude:** 26.03806

**Latitude:** -32.781687

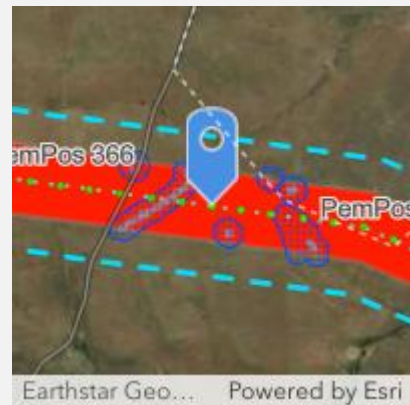
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m







intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 362

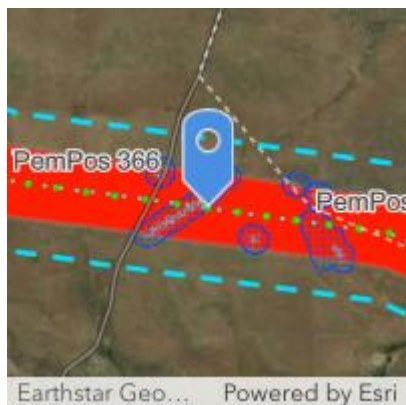
**Longitude:** 26.033366

**Latitude:** -32.781159

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 363

**Longitude:** 26.028689

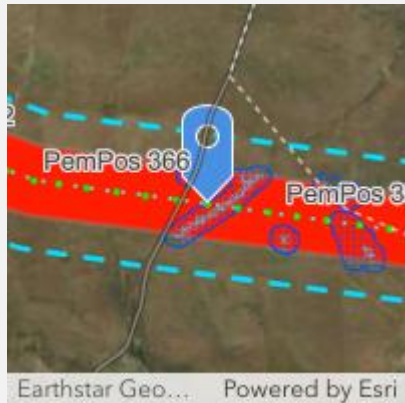
**Latitude:** -32.780614

Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.





**Sampling Point Name:** PemPos 364

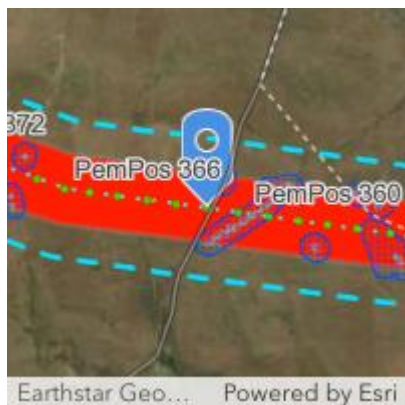
**Longitude:** 26.023988

**Latitude:** -32.780063

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 365

**Longitude:** 26.019151

**Latitude:** -32.779536

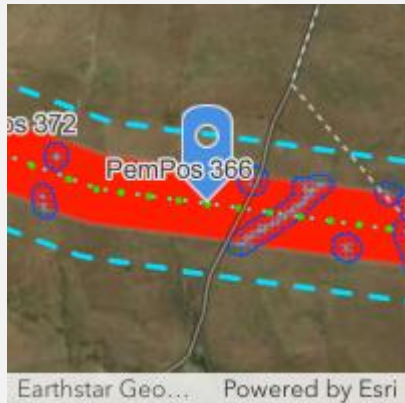
Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.







**Sampling Point Name:** PemPos 366

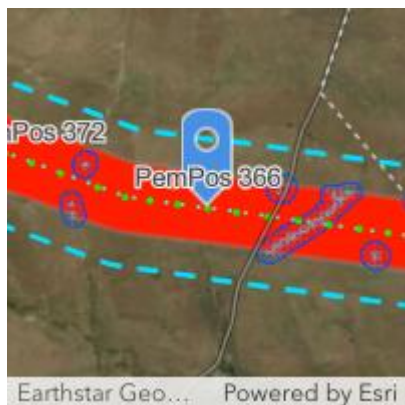
**Longitude:** 26.014736

**Latitude:** -32.779015

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 367

**Longitude:** 26.010147

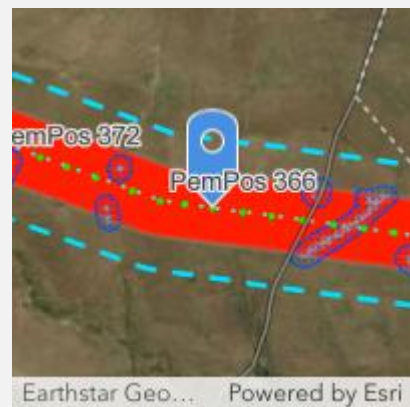
**Latitude:** -32.77852

Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

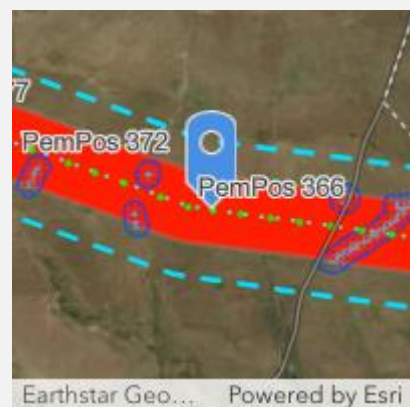




**Sampling Point Name:** PemPos 368

**Longitude:** 26.005822

**Latitude:** -32.778012



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 369

**Longitude:** 26.002056

**Latitude:** -32.777578

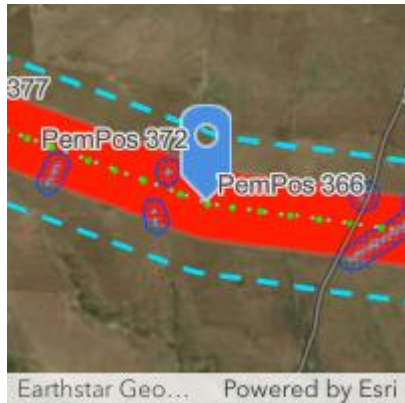
**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



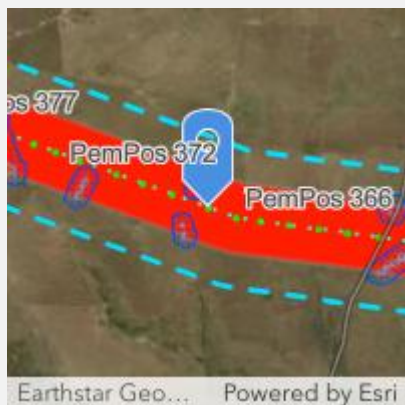




**Sampling Point Name:** PemPos 370

**Longitude:** 25.997712

**Latitude:** -32.7763



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

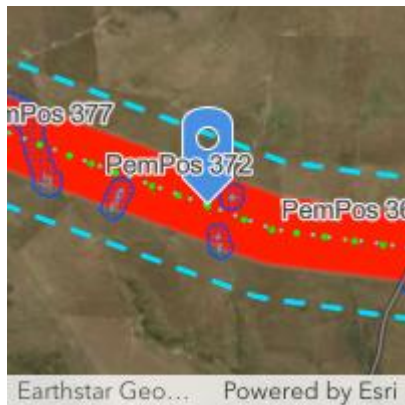
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 371

**Longitude:** 25.992247

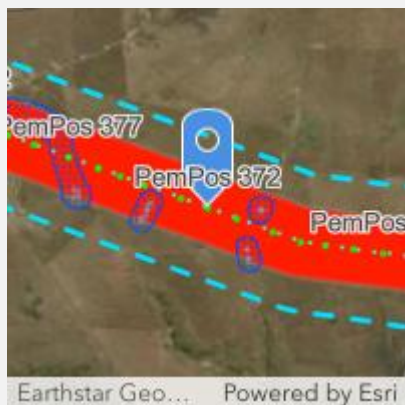
**Latitude:** -32.774571



**Sampling Point Name:** PemPos 372

**Longitude:** 25.987809

**Latitude:** -32.773208



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

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**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 373

**Longitude:** 25.983709

**Latitude:** -32.771971

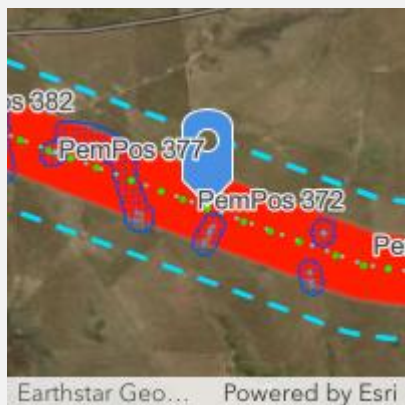




**Sampling Point Name:** PemPos 374

**Longitude:** 25.978196

**Latitude:** -32.77023



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



Findings: No specific ecological constraints were recorded.

Sensitivity: High

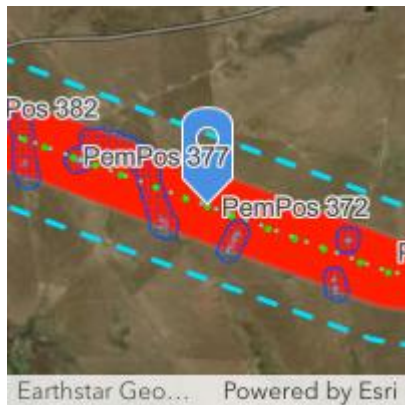
Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 375

**Longitude:** 25.974432

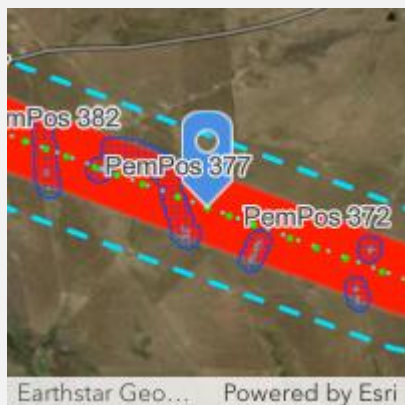
**Latitude:** -32.769048



**Sampling Point Name:** PemPos 376

**Longitude:** 25.971086

**Latitude:** -32.768095



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

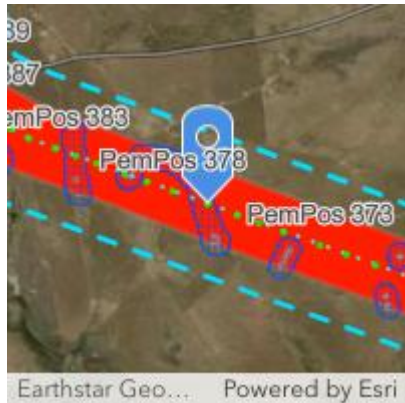


**Sampling Point Name:** PemPos 377

**Longitude:** 25.96651

**Latitude:** -32.766693

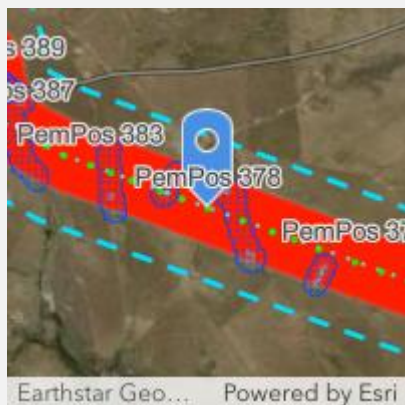




**Sampling Point Name:** PemPos 378

**Longitude:** 25.961128

**Latitude:** -32.765008



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

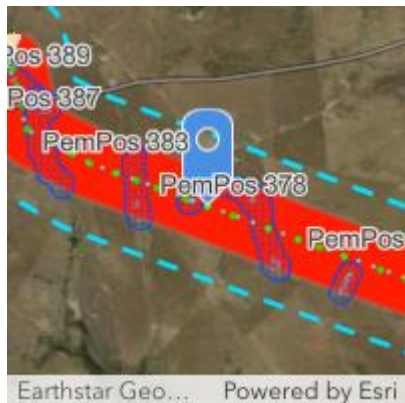
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 379

**Longitude:** 25.957229

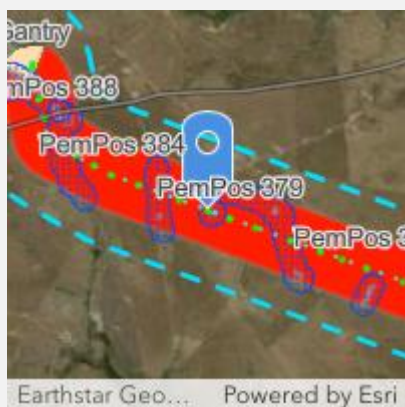
**Latitude:** -32.763763



**Sampling Point Name:** PemPos 380

**Longitude:** 25.953784

**Latitude:** -32.762711



Findings: No specific ecological constraints were recorded, but near water resources

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



Findings: No specific ecological constraints were recorded.

Sensitivity: High

Recommendations: Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 381

**Longitude:** 25.949483

**Latitude:** -32.761414

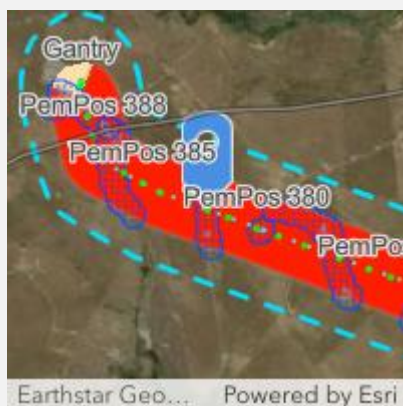




**Sampling Point Name:** PemPos 382

**Longitude:** 25.946342

**Latitude:** -32.760469



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

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**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

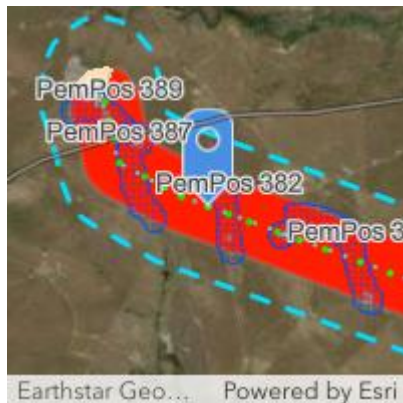
**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 383

**Longitude:** 25.943099

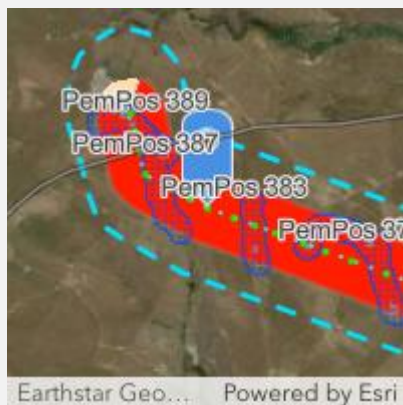
**Latitude:** -32.759437



**Sampling Point Name:** PemPos 384

**Longitude:** 25.939117

**Latitude:** -32.758203



**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

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**Findings:** No specific ecological constraints were recorded.

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

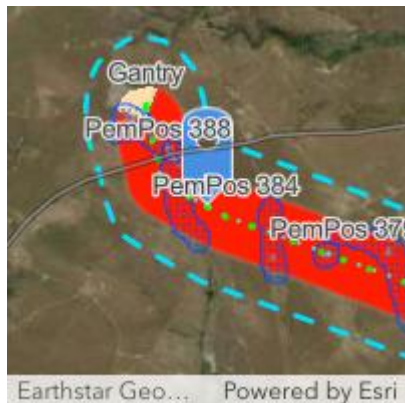


**Sampling Point Name:** PemPos 385

**Longitude:** 25.936381

**Latitude:** -32.756881

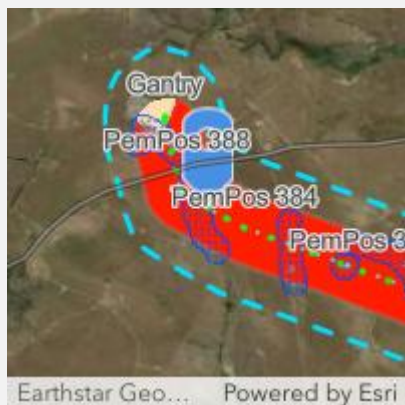




**Sampling Point Name:** PemPos 386

**Longitude:** 25.933478

**Latitude:** -32.75566



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 387

**Longitude:** 25.929609

**Latitude:** -32.753838

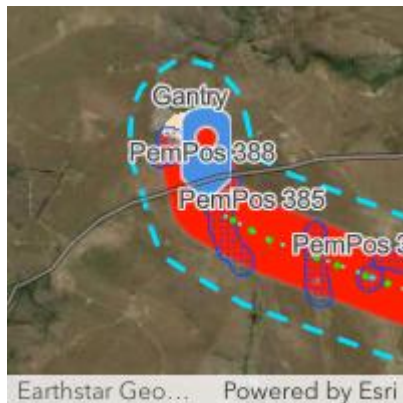
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.

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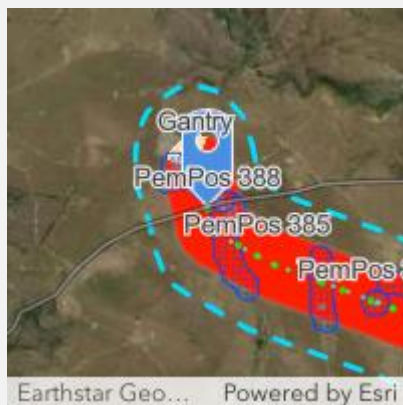




**Sampling Point Name:** PemPos 388

**Longitude:** 25.928796

**Latitude:** -32.750851



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



**Sampling Point Name:** PemPos 389

**Longitude:** 25.928064

**Latitude:** -32.748289

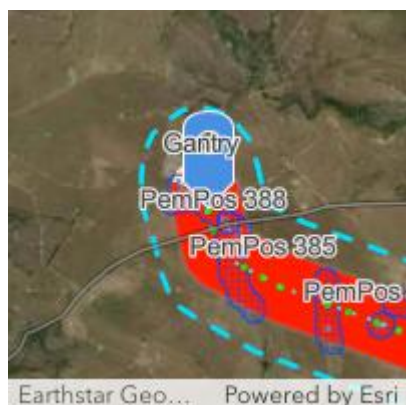
**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



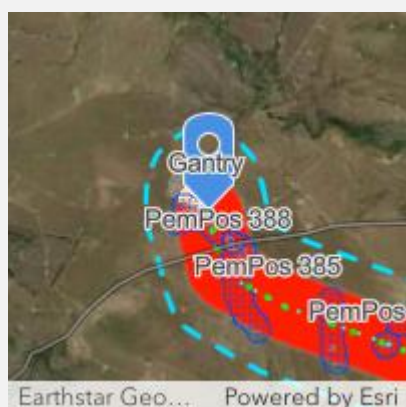




**Sampling Point Name:** PemPos 390

**Longitude:** 25.927335

**Latitude:** -32.746007



**Findings:** No specific ecological constraints were recorded, but near water resources

**Sensitivity:** High

**Recommendations:** Bird flight diverters as per industry standards (15 m intervals), fitted with anti-peach devices and ongoing monitoring as per section 3.



## 2.3 Mitigation

The purpose of the Biodiversity Impact Management Actions is to present the mitigations in such a way that they can be incorporated into the Environmental Management Programme (EMPr), allowing for more successful implementation and auditing of the mitigations and monitoring guidelines. This mitigation table must be read in conjunction with the Generic Environmental Management Programme (EMPR) for the development and expansion of substation infrastructure for the transmission and distribution of electricity as per No. 42323 GOVERNMENT GAZETTE, 22 MARCH 2019.

All impact management actions presented in the original assessment remain applicable. Impact management actions should be considered for inclusion in the EMPr are presented below.

Table 2-4 details the mitigation measures necessary for implementation, while Table 2-5 provides recommended mitigation measures for the Environmental Assessment Practitioner

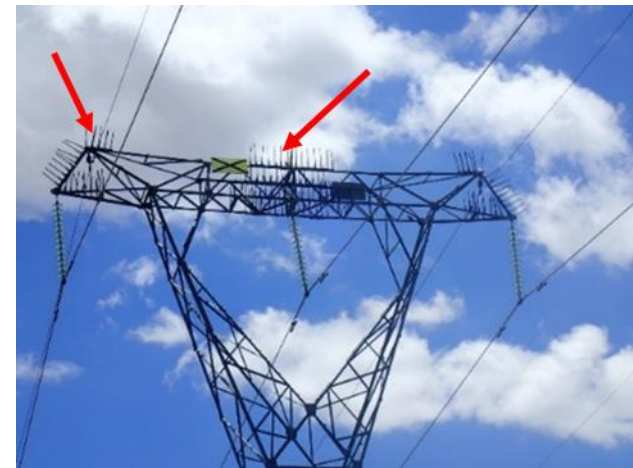
(EAP) to consider, aimed at minimising the overall impact on avifauna. Both tables include corresponding timeframes, targets, and performance indicators specific to the avifaunal component.

**Table 2-4** *Specific avifauna management outcomes pertaining to impacts to avifauna and their habitats*

Impact Management Actions	Implementation		Monitoring	
	Phase	Responsible Party	Aspect	Frequency
The route of the powerline must follow as closely as possible to existing infrastructure to minimise the impact.	Life of Operation	Project Manager Environmental Officer Design Engineer	Development footprint	Ongoing
Any devices that become damaged or fall during the operational phase must be replaced as per Eskom standards.	Operational Phase	Project Manager Environmental Officer	Bird Collisions	Ongoing
Ensure that the phase cables are spaced far enough apart to reduce the risk of large birds (vultures) touching both simultaneously. If such separation (isolation) cannot be provided, exposed parts must be covered (insulated) to reduce electrocution risk.	Construction/Operational Phase	Project Manager Environmental Officer Design Engineer	Bird Electrocutions	Ongoing
A maintenance schedule must be followed as per Eskom maintenance standards to ensure that all components are still intact and do not pose an electrocution risk, this must be done for the extent of the lifetime of the powerline.	Life of Operation	Developer	No loose wires, ect to pose an electrocution risk	Ongoing
All infrastructure must be removed if the facility is decommissioned.	Closure/Rehabilitation	Project Manager Environmental Officer	Infrastructure removal	During Process
The design of the grid lines must be of a type or similar structure as endorsed by the Eskom-EWT Strategic Partnership on Birds and Energy, considering the mitigation guidelines recommended by Birdlife South Africa (Jenkins et al., 2015).	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of electrocuted birds or bird strikes	During Phase
Infrastructure should be consolidated where possible in order to minimise the amount of ground and air space used.	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of bird collisions	During phase
Powerlines must be fitted with industry-standard bird flight diverters in order to make the lines as visible as possible to collision-susceptible species. Shaw et al (2021) demonstrated that large avifauna species mortality was reduced by 51% (95% CI: 23–68%). Recommended bird diverters such as flapping devices (dynamic device) and thickened wire spirals (static device) must be fitted as <b>discussed in Table 2-3</b> . The Inotec BFD88 bird diverter is highly recommended due to its visibility under low light conditions when most species move from roosting to feeding sites.	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of bird collisions	During phase





All the parts of the infrastructure must be nest-proofed and anti-perch devices placed on areas that can lead to electrocution				
	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of electrocuted birds	During phase
Install anti-perch devices such as spikes to prevent Pied Crows from nesting/perching.	Planning and construction	Environmental Officer & Contractor, Engineer	Over predation of tortoise	During phase
Any exposed parts must be covered (insulated) to reduce electrocution risk	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of electrocuted birds	During phase
Avifauna monitoring needs to be implemented by an avifauna specialist for the first two years of operation	Life of Operation	Avifauna specialist	Assess the impact	Operational phase

**Table 2-5**      **Generic management outcomes pertaining to impacts to avifauna and their habitats**

Impact Management Actions	Implementation		Monitoring	
	Phase	Responsible Party	Aspect	Frequency
<b>Management outcome: Habitats</b>				
Cement must be mixed in a designated area on a liner away from water sources and 100m buffer around the freshwater delineations so that successful rehabilitation of the construction areas can take place.	Planning Construction	and Project Manager Environmental Officer Contractor Engineer	Water pollution and restricted rehabilitation	During phase
Leaking equipment and vehicles must be repaired immediately or removed from PAOI to facilitate repair.	Life of operation	Environmental Officer Contractor	Leaks and spills	Ongoing
<b>Management outcome: Avifauna</b>				
Impact Management Actions	Implementation		Monitoring	
	Phase	Responsible Party	Aspect	Frequency
All construction and maintenance motor vehicle operators should undergo an environmental induction that includes instruction on the need to comply with speed limit (40 km/h), to respect all forms of wildlife. Speed limits must be enforced to ensure that road killings and erosion is limited.	Life of Operation	Health and Safety Officer	Compliance to the training.	Ongoing
All project activities must be undertaken with appropriate noise mitigation measures to avoid disturbance to avifauna population in the region	Construction/Operational Phase	Project Manager Environmental Officer	Noise	Ongoing
Use environmentally friendly cleaning and dust suppressant products	Construction Operation	and Environmental Officer Contractor Engineer	Chemicals used	During phase

### 3 Monitoring

Avifaunal SCC monitoring must be done to determine the effect of the development on these species, this would also allow for more available data for future projects.

- Monitoring must be done for 2 consecutive years during or after construction depending on the total length of construction. Based on the results, monitoring can then cease or must continue based on the recommendations of the assessment. Monitoring must include walking the lines quarterly to determine the bird strikes present during the first year. However, thereafter as per the Eskom standards. Monitoring must be conducted as per the guidelines specified in the Species Protocols (2020). The information obtained from the monitoring must be shared with the large terrestrial birds programme of Birdlife (<https://www.birdlife.org.za/what-we-do/landscape-conservation/meet-the-team/>). Any carcasses found beneath power lines should be reported to the Eskom / EWT Incident Reporting Hotline (0860 111 535, email [wep@ewt.org.za](mailto:wep@ewt.org.za))



### 3.1 Conclusions and Recommendations

Recommendations have been provided for the footprint areas that will notably impact the local habitats and / or SCC. The following recommendations are in addition to what has been provided for the footprint areas:

**Table 3-1 Suggested mitigation**

From Tower	To Tower	Mitigation
<b>PemPos 1</b>	PemPos 98	No mitigation required, due to the close proximity to the rural development; however, monitoring needs to be adhered to in section 3 and EMPr.
<b>Pembroke 99</b>	Pembroke 107	Bird flight diverters as per industry standards (15 m intervals), fitted with anti-perch devices and ongoing monitoring as per section 3.
<b>Pembroke 108</b>	PemPos 269	It is recommended that NTCSA mark one-third of the line with nocturnal BFDs in an experimental block design (a repeating pattern of 4 spans marked, 8 spans unmarked) and monitor the line for carcasses across all four seasons for at least one year after construction and mitigation. Should hotspots emerge during the one-year post-construction study NTCSA will mark the identified spans if they happen to be part of the unmarked spans within 365 days of receiving the specialist report. This is to be completed by a SACNASP-registered avifauna specialist
<b>PemPos 270</b>	PemPos 390	Bird flight diverters as per industry standards (15 m intervals), fitted with anti-perch devices and ongoing monitoring as per section 3.

- Due to the high sensitivities of the proposed line, a SACNASP-registered avifauna specialist will have to draft a detailed ornithological management plan. Herewith are some preliminary suggestions:
  1. During the first year, the line needs to be monitored quarterly by a SACNASP registered avifauna specialist; monitoring should include carcasses searches to identify further hotspot areas along the power line that need further mitigations;
  2. During the second year, the line needs to be monitored bi-annually;
  3. Thereafter, it needs to be monitored every 3 – 5 years;
  4. If hotspots or excessive deaths are observed, additional mitigations must be implemented.
- All mitigation measures prescribed within the report must be adhered to.

## 4 References

BirdLife South Africa. 2017. Birds and Solar Energy Best Practice Guidelines. <https://www.birdlife.org.za/wp-content/uploads/2020/03/BLSA-Guidelines-Solar-and-Energy.pdf>

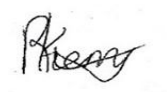
Shaw, J.M., Reid, T.A., Gibbons, B.K., Pretorius, M., Jenkins, A.R., Visagie, R., Michael, M.D. & Ryan, P.G. 2021. A large-scale experiment demonstrates that line marking reduces power line collision mortality for large terrestrial birds, but not bustards, in the Karoo, South Africa. Ornithological Applications, 123: 1-10.

### 4.1 Appendix C – Specialist Declaration of Independence

#### Declaration

I, Ryno Kemp, declare that:

- I act as the independent specialist in this application;
- I will 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;
- 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 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;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.





Ryno Kemp

Ecologist

The Biodiversity Company

August 2025