

# **Goyder North Wind Farm**

Iron-grass Natural Temperate Grassland Threatened Ecological Community Management Plan

#### **Draft**

September 2025





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Prepared by Umwelt (Australia) Pty Limited

On behalf of Neoen Australia Pty Ltd

Project Director: Alison Derry
Project Manager: Jessica Skewes
Technical Director: Emma Tremain
Report No.: 31669/R10
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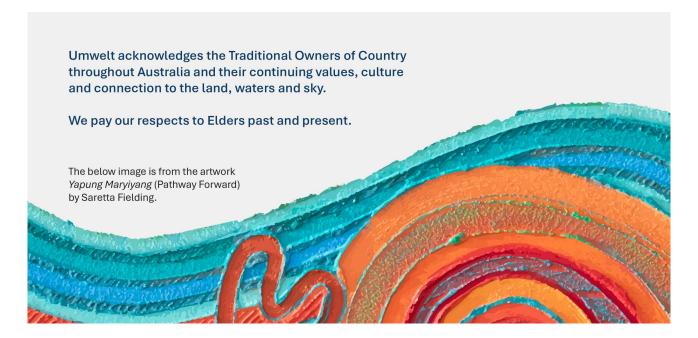




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#### **Document Status**

Rev No.	Reviewer Name	Date	Approved for Issue Name	Date
V1.0	J. Carpenter	1/03/2024	A. Derry	4/03/2024
V1.1	A. Derry, H. Pocock, N. Bull, J. Skewes	04/07/2024	A. Derry	04/07/2024
V1.2	J. Skewes, I. Marshall, Dr M. Louter	06/06/2025	A. Derry	24/06/2025
V1.3	J. Skewes	20/08/2025	A. Derry	25/08/2025
V2	I. Marshall	27/08/2025	A. Derry	27/08/2025



## **Declaration of Accuracy**

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulation 2000 (Commonwealth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this decision.

Full name:
Position:
Organisation: Neoen Australia Pty Ltd
EPBC Referral Number: EPBC 2024/09929
Name of Action Management Plan this document and declaration refers to:
Iron-grass Natural Temperate Grassland TEC Management Plan for Goyder North Wind Farm

Date:

Signed:



## **Abbreviations**

Abbreviation	Description		
	Description		
BAM	Bushland Assessment Methodology		
BESS	Battery Energy Storage Systems		
CEMP	Construction Environmental Management Plan		
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth)		
DEW	Department of Environment and Water (South Australia)		
EBS	Environment and Biodiversity Services Pty Ltd – trading as EBS Ecology (Now Umwelt)		
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)		
EPC	Engineering, Procurement Contracts		
GNWF	Goyder North Wind Farm Project (includes WF and OTL)		
GNREF	Goyder North Renewable Energy Facility		
GRZ	Goyder Renewables Zone		
GSHREP	Goyder South Hybrid Renewables Energy Project		
GS	Goyder South		
GSS1	Goyder South Stage 1		
HSE Manager	Health, Safety and Environment Manager		
INTG	Iron-grass Natural Temperate Grassland		
IUCN	International Union for Conservation of Nature		
MNES	Matter(s) of National Environmental Significance		
MW	Megawatts		
MWh	Megawatt hour		
Neoen	Neoen Australia Pty Ltd		
NPW Act	National Parks and Wildlife Act 1972 (South Australia)		
NV Act	Native Vegetation Act 1991 (South Australia)		
NVC	Native Vegetation Council		
ОЕМР	Operational Environmental Management Plan		
OTL	Overhead Transmission Line		
SA	South Australia(n)		
SEB	Significant Environmental Benefit		
sp.	Species (singular)		
spp.	Species (plural)		
ssp.	Subspecies		
TEC	Threatened Ecological Community		
the Department	The Department of Climate Change, Energy, the Environment and Water (Commonwealth)		
WF	Wind Farm components, comprising boundary around the windfarm infrastructure components in GNWF		
	Components in Onwi		
WTG	Wind Turbine Generators		
WTG <			



Abbreviation	Description	
>	More than	
≤	Less than or equal to	
≥ More than or equal to		
%	Percent / percentage	



# **Glossary**

Terminology	Definition
Action	The Action includes both construction and operation of the proposed Project, and any change from existing activities which are required to undertake these tasks safely and effectively.
Declared Weed	A plant that is regulated under the <i>Landscape South Australia Act 2019</i> due to its threat to primary industry, the natural environment and public safety.
Department	The Australian Government agency responsible for administering the EPBC Act.
Development Envelope (DE)	A 'buffered' version of the Disturbance Footprint that represents the spatial extent within which the Disturbance Footprint is expected to occur.
Disturbance Footprint (DF)	The area where permanent and temporary infrastructure is proposed and the maximum spatial extent of vegetation clearance and/or earthworks to allow for construction of the GNWF.
met mast	Meteorological mast (mast or tower equipped with instruments to measure windspeed and climatic conditions).
Minister	The Australian Government Minister administering the EPBC Act including any delegate thereof.
New or Increased Impact	A new or increased environmental impact or risk relating to any protected matter, when compared to the likely impact of implementing the action management plan that has been approved by the Minister under conditions 3 and 4, including any subsequent revisions approved by the Minister, as outlined in the Guidance on 'new or increased impact' relating to changes to approved management plans under EPBC Act environmental approvals, Commonwealth of Australia 2017.
Operation	All activities that occur after the components of the final wind turbine generator are installed and the usage of the transmission line and substation for the purposes of transforming and/or redistributing electric current.
Plan(s)	Any of the documents required to be prepared, approved by the Minister, implemented by the approval holder and published on the website in accordance with the EPBC Act approval (2024) conditions (includes action management plans and/or strategies).
Project	The Goyder North Wind Farm Project, inclusive of Wind Turbine Generators (WTG), overhead power transmission line (OTL), expansion of existing Bundey substation, on-site battery energy storage systems (BESS), access tracks and temporary facilities and infrastructure to enable construction. The Project is part of the larger Goyder North Renewable Energy Facility which includes a future stage of development which is not yet defined.
Project Area	All Project components within GNWF including WF and OTL.
Project Components	Includes boundaries of GNREF, GNWF, Development Envelope, Disturbance Footprint and Search Area.
Project Elements	Distinct functional elements of the GNWF Project including WF, OTL and Site Access.



Terminology	Definition
Residual Impact	Impacts which are important, notable, or of consequence, having regard to their context or intensity, and assessed within the framework of the Matters of National Environmental Significance – Significant Impact Guidelines 1.1, Commonwealth of Australia 2013.
Search Area	A buffer of 5 km around GNREF applied to all database searches and desktop study.
Significant Impact(s)	Impacts which are important, notable, or of consequence, having regard to their context or intensity, and assessed within the framework of the Matters of National Environmental Significance – Significant Impact Guidelines 1.1, Commonwealth of Australia 2013.



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**Appendix 1** Iron-grass Natural Temperate Grassland Patches

**Appendix 2** INTG Management Zones



### 1.0 Introduction

Neoen Australia Pty Ltd (Neoen) is developing the Goyder Renewables Zone (GRZ) (**Figure 1.1**), a highly efficient energy generation project, with world class wind resources and strong external support demonstrated by it being declared the only wind generation Priority Project in South Australia and being awarded a Capacity Investment Scheme contract by DCCEEW. The GRZ is ideally located to complement Project EnergyConnect (PEC), a large transmission line interconnector between South Australia (SA) and New South Wales (NSW) currently under construction by ElectraNet (in SA) and TransGrid (in NSW).

The broader GRZ includes the Goyder South Hybrid Renewables Energy Project (Development Approval granted in 2021, with Goyder South Stage 1 (GSS1) currently under construction) (GS; GSHREP) and the Goyder North Renewable Energy Facility (GNREF).

The GNREF Project Area is located north-east of Burra and east of the Mount Bryan township in the Goyder Regional Council area, approximately 150 kilometres (km) north of Adelaide, South Australia. Planning consent was achieved for the GNREF in 2024. Since the Planning consent was achieved, Neoen is progressing a refined the design for up to 600 MW of wind generation and 225 MW/ 900 MWh of BESS, located in the southern portion of the GNREF, titled Goyder North Wind Farm Project (GNWF; The Project), which has a proposed Disturbance Footprint of approximately 536.82. Neoen has no current plan to develop further stages and should further stages be progressed in the future they would be subject to their own approval processes and stakeholder engagement.

This Iron-grass Natural Temperate Grassland of South Australia Threatened Ecological Community (INTG TEC) Management Plan has been prepared for GNWF to outline the likely direct and potential indirect impacts to the INTG TEC during construction and operation of the Project, and the proposed management measures that will be implemented to avoid, minimise and/or mitigate them.

This INTG TEC Management Plan must be read and implemented in conjunction with the Goyder North Wind Farm Construction Environmental Management Plan (*in draft*), which is referred to as the CEMP, as well as the Goyder North Wind Farm the Operational Environmental Management Plan (OEMP), to be prepared prior to commissioning completion of the GNWF, and any sub-plans prepared as part of the CEMP and / or OEMP.

Furthermore, and in accordance with specific conditions of approval associated with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approvals obtained for the Project from the Department of Climate Change, Energy, the Environment and Water (DCCEEW; the Department), this INTG TEC Management Plan is required to be implemented for the duration of the EPBC Act approval, or the life of the Project. More information on the EPBC Act approval obtained for the Project is provided in the following section, while more information on the specific conditions of the EPBC Act approval and compliance is provided in **Section 2.0**.



#### 1.1 Overview of the Goyder North Wind Farm

GNWF incorporates the southern two thirds of the GNREF Project Area and includes an Overhead Transmission Line (OTL) traversing approximately 48 km south-east, where it connects to the existing Bundey Substation (**Figure 1.2**). GNWF is comprised of:

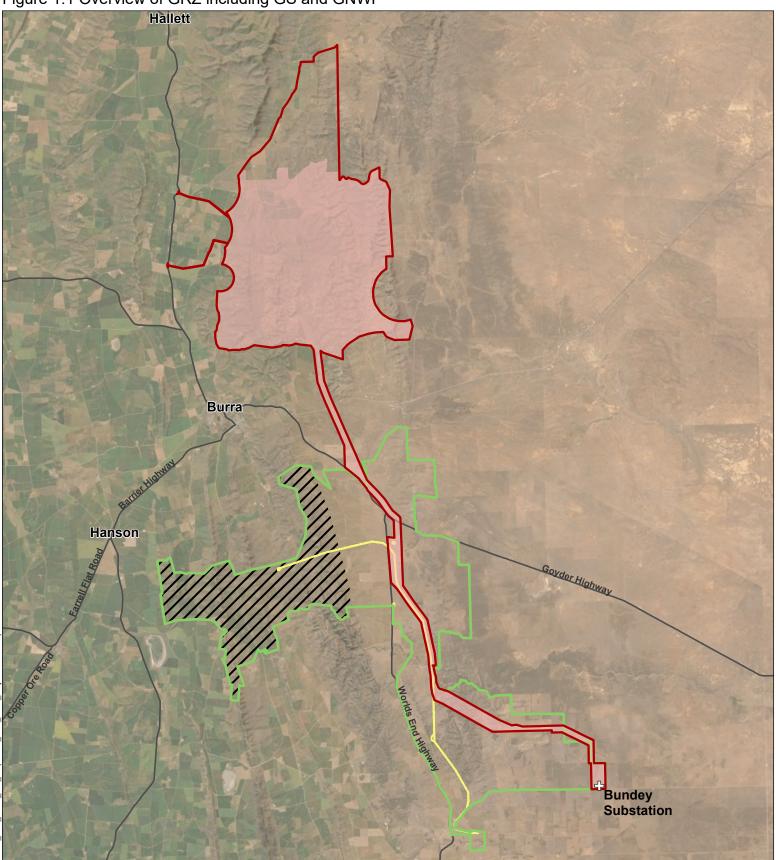
- Up to 99 WTGs with a total nameplate capacity of up to 600 MW, a maximum hub height of 160 m, a maximum blade length of 95 m, and an overall maximum height of 240 m.
- Associated infrastructure for connection to the electricity grid including underground cables, substations (one or two at the wind farm and the other as an extension of the existing Bundey Substation) and ~48 km of OTL between the wind farm at the Bundey Substation.
- One Battery Energy Storage System (BESS) in the main wind farm (WF) area.
- Access tracks (permanent and additional temporary tracks for construction access).
- Temporary and permanent laydown areas, temporary concrete batching plant facilities, temporary construction compounds and site offices as well as permanent operations and maintenance facilities.
- This Plan relates to GNWF, which is currently under development, and is hereafter referred to as
  the Project or the Project Area. Any subsequent future stages, if developed, will develop and
  implement a separate Management Plan if applicable. An overview of GNWF along with the
  corresponding EPBC approval sought and obtained is outlined in Table 1.1.

INTG TEC will be impacted by the GNWF Project. As such, this INTG TEC Management Plan has been prepared to outline the likely and potential direct and indirect impacts to INTG TEC during construction and operation of the GNWF, and the proposed management measures that will be implemented to avoid, minimise and / or mitigate them.

Table 1.1 EPBC Approval Details for GNWF

Proposed Action	Legal Entity	EPBC Referral Reference	EPBC Referral Decision	Date EPBC Approval Achieved
GNWF	TBC	EPBC2024/09929	Controlled Action	Pending Approval
(up to 99 WTGs and				
associated				
infrastructure)				

Figure 1.1 Overview of GRZ including GS and GNWF







**GNWF** 







**Bundey Substation (existing)** 



Data Source: Umwelt (2025), ESRI (2025), DEW (2022), DIT (2022) Neoen (2025)
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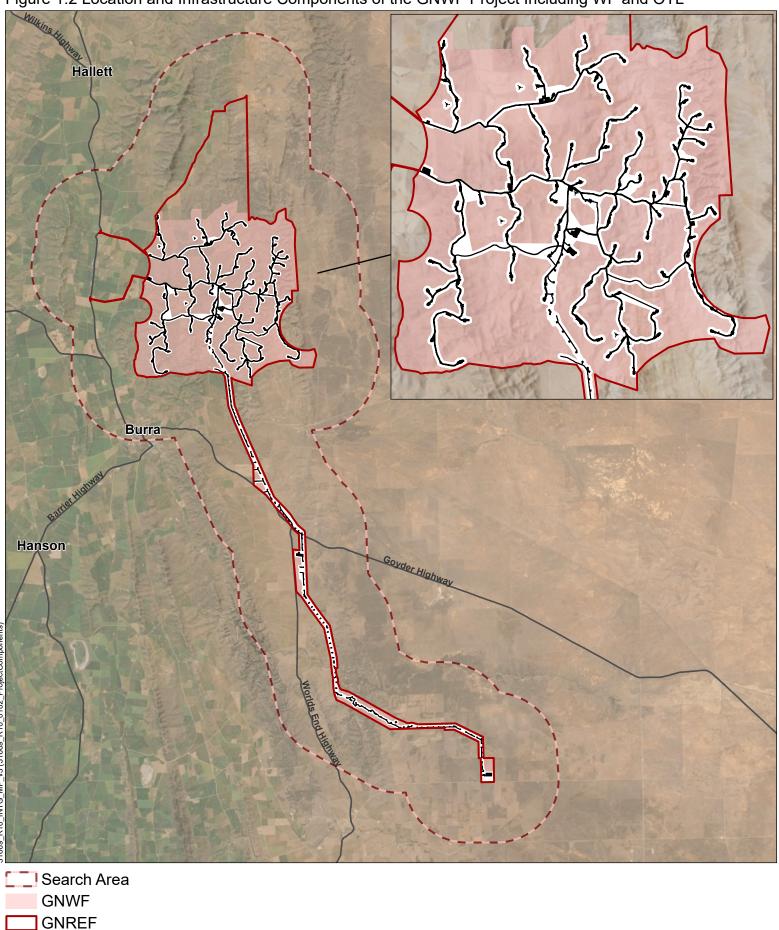
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Figure 1.2 Location and Infrastructure Components of the GNWF Project Including WF and OTL



**Development Envelope** 

Disturbance Footprint







#### 1.1.1 Relevant Project Terminology and Definitions

Several project specific terminology and abbreviations which are referred to repeatedly throughout the report. Project boundaries components are described below in **Table 1.2**.

Table 1.2 Project Specific Terminology and Abbreviations

Term	Abbreviation	Description
Goyder North Renewable Energy Facility	GNREF	The broader area for which Planning Consent was granted in October 2024 which bounds the direct wind farm infrastructure of access roads and WTGs, which includes GNWF as well as the OTL that connects into the existing Bundey Substation, and expansion of the Bundey Substation.
Goyder North Wind Farm	GNWF	The portion of the GNREF which is currently proposed for development and is the focus of this assessment and management plan. Includes all wind generation infrastructure (generating up to 600 MW) and associated infrastructure, including access roads, underground cables, substations, OTL, construction and operation compounds and met masts, required to transmit and connect into the existing Bundey Substation.
Disturbance Footprint	DF	The total initial clearance area required for safe and efficient construction of the proposed GNWF Project, including both permanent and temporary clearance for construction buffers, laydown areas, stockpile areas and construction access routes for the Wind Farm generation components and the OTL.
Development Envelope	DE	A 'buffered' version of the Disturbance Footprint that represents the outer spatial extents within which the Disturbance Footprint will occur. Design is well developed and optimised to minimise cut and fill, avoid known sites of significance or value, and to minimise the Disturbance Footprint. The Development Envelope is an extra measure to enable final adjustments to the Disturbance Footprint in alignment with the Mitigation Hierarchy to avoid or minimise impacts on environmental values, cultural heritage or any other potential constraints that emerge during design finalisation and construction.

The naming conventions and related Project Area boundaries of GNWF have evolved throughout the design and approval process, with various supporting documents referring to the Project as Goyder North Renewable Energy Facility Stage 1, Goyder North Stage 1 (GN1) and Goyder North Wind Farm Stage 1 and Stage 2. With no further stages currently planned beyond the 99-turbine configuration, the Project is hereafter referred to as Goyder North Wind Farm (GNWF).

#### 1.1.2 Relevant Previous Reports

The following reports and documentation should be referred to for important background and supporting information:

- Goyder North Ecological Constraints Mapping (EBS Ecology, 2023a);
- Goyder North Renewable Energy Facility and Overhead Transmission Line Risk Assessment Summary (EBS Ecology, 2023b);



- Goyder North Stage 1 and Stage 2 Wind Farm Native Vegetation Clearance Data Report (Umwelt, 2025a);
- Goyder North Wind Farm Iron-grass Natural Temperate Grassland Threatened Ecological Community Assessment (Umwelt, 2025b); and
- Goyder North Wind Farm Ecological Assessment Report (Umwelt, 2025c).

#### 1.2 Purpose and Objectives

#### 1.2.1 Purpose

This INTG MP has been prepared by Umwelt on behalf of Neoen. This INTG MP applies to construction and operation activities carried out for GNWF and has been prepared as a sub-plan of the Construction Environmental Management Plan (CEMP) (Umwelt 2025 – in draft) and Operational Environmental Management Plan (OEMP) (to be adapted).

#### 1.2.2 Objectives

The objectives of this INTG TEC Management Plan (Table 1.3) are to:

- Provide ecological community profile information on the INTG TEC.
- Provide information on the location of INTG TEC within GNWF.
- Provide measures to avoid, minimise and mitigate adverse environmental impacts to INTG TEC during construction and operation phases of GNWF.
- Provide measures to improve likelihood of rehabilitation success in areas of temporary clearance.
- Satisfy regulatory requirements and approval conditions.

To fulfil these objectives for the GNWF this INTG MP will:

- Outline measures which ensure that there is no disturbance to INTG TEC outside of the designated (and approved) Disturbance Footprint.
- Outline measures to ensure the disturbance and impact of works on INTG TEC is strictly limited to only that which is critical for the construction and operations of the project.
- Outline measures that ensure that micro siting does not result in additional disturbance to INTG
  TEC above the approved disturbance limits specified in the EPBC Approval Conditions and Native
  Vegetation Approval Conditions (pending). [Placeholder to be updated in final].
- Outline a monitoring program to report on success of rehabilitation in areas of temporary clearance.

Neoen is committed to implementing the INTG TEC Management Plan during construction and operation for the life of the Project, per the EPBC Act approval conditions. Neoen will not commence construction or operation until the INTG TEC Management Plan has been approved in writing by the Australian Government Minister administering the EPBC Act.



Table 1.3 Objectives and Commitment to the Management of INTG

Objectives	Commitment	Reference (Linked)
Provide profile information on INTG TEC.	Profile information on INTG is provided in this INTG Management Plan.	Section 3.0
Provide information on the location of INTG TEC within GNWF.	This INTG Management Plan will be kept current with the location of INTG TEC within GNWF, if found within the GNWF Project Area post-EPBC Act approvals.	Section 3.0
Avoid and minimise impacts to INTG TEC during construction and operation phases of the GNWF Project.	Neoen is committed to avoiding and minimising impacts on INTG during pre-construction, construction and operation phases of the GNWF Project. This plan will be revised to include new information on the avoidance and minimization measures applied to INTG within the GNWF during construction.	Section 4.0 Section 9.0 Section 10.0
Ensure that there is no disturbance to INTG outside of the Disturbance Footprint, and to ensure the disturbance and impact of works on INTG TEC is strictly limited to only that which is critical for the construction and operations of the project.	Neoen is committed to ensuring that there is no disturbance to INTG outside of the Disturbance Footprint via implementation of this INTG Management Plan, including specific management targets, performance indicators and triggers, construction and operation management measures.	Section 7.0 Section 8.0 Section 9.0 Section 10.0 Section 11.0
Ensure that micro siting within the Development Envelope does not result in additional disturbance to INTG TEC outside of the approved disturbance limits.	Infrastructure will not be micro sited if it does not result in a reduction of potential impacts to INTG and Neoen commits that micro siting will not increase impacts to INTG TEC or other MNES (for example INTG and/or INTG habitat).	Section 8.0
Outline a monitoring program to report on the success of rehabilitation in areas of temporary clearance.	Neoen is committed to the rehabilitation of INTG in areas of temporary clearance which is outlined in <b>Section 11.0</b> .	Section 11.0



## 2.0 Compliance

This INTG TEC Management Plan has been prepared by Umwelt in accordance with the relevant legislation, policies and guidelines summarised in **Table 2.1**. Relevant Approval Conditions for the GNWF in relation to the EPBC Act and NV Act are outlined in **Table 2.2** and **Table 2.3**.

 Table 2.1
 Relevant Legislation, Policies and Guidelines

Jurisdiction	Legislation, Policies and Guidelines
Commonwealth	Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Conditions of approval under the EPBC Act are listed in <b>Table 2.2.</b>
	National Recovery Plan for the Iron-grass Natural Temperate Grassland of South Australia ecological community (Turner, 2012).
	Approved Conservation Advice for Iron Grass Natural Temperate Grassland of South Australia (DEWHA, 2008).
	Environmental Management Plan Guidelines, Commonwealth of Australia (DCCEEW, 2024).
	EPBC Act Policy Statement 3.7: Nationally Threatened Species and Ecological Communities Peppermint Box ( <i>Eucalyptus odorata</i> ) Grassy Woodland of South Australia and Iron Grass Natural Temperate Grassland of South Australia (DEWR, 2007).
	Commonwealth Listing Advice on Iron-grass Natural Temperate Grassland of South Australia (Threatened Species Scientific Committee, 2007).
	Farming and Nationally Protected Iron-grass Natural Temperate Grassland (DSEWPaC, 2011).
State (South Australia)	Planning, Development and Infrastructure Act 2016 (PDI Act). Development Approval (Application ID: 23036148) received on 28 October 2024.
	Native Vegetation Act 1991 (NV Act) and associated Native Vegetation Regulations 2017.
	An application to the Native Vegetation Council (NVC) for clearance of native vegetation associated with the GNWF construction is currently with the NVC.
	National Parks and Wildlife Act 1972 (NPW Act).
	Hydrogen and Renewable Energy Act 2023.
Local	There are no relevant local policies, legislation, guidelines and approval conditions as of July 2024.



[Placeholder – tables to be updated in final]

Table 2.2 Conditions of EPBC Approval Relevant to INTG TEC

Condition Number	Approval Condition Description	Relevant Section in This Report

#### Table 2.3 Conditions of NV Act Approval Relevant to INTG TEC

Condition Number	Approval Condition Description	Relevant Section in This Report



### 3.0 INTG TEC Profile

#### 3.1 Conservation Status

INTG TEC (**Photo 3.1**) is listed as Critically Endangered under the EPBC Act and Endangered under the South Australian NPW Act. These classifications are consistent with the International Union for Conservation of Nature criteria for listing species on the IUCN Red List System (IUCN Species Survival Commission, 2012).



Photo 3.1 Class B Lomandra Grassland in the GN1 Project Area (Photo by EBS Ecology, 2022)

### 3.2 Ecology and Biology

#### 3.2.1 Description

INTG TEC is classified as a natural grassland dominated by tussock forming perennial grasses and iron-grasses (*Lomandra effusa* or *Lomandra multiflora* ssp. *dura*). Between 10% and 70% of the ground cover is covered by *Lomandra* ssp. with a range of herbaceous plant species in the intertussock spaces, and an absence (<10% cover) of trees or shrubs (Turner, 2012). The terms 'Lomandra Grassland' and 'Iron-grass Grassland' are used interchangeably for this ecological community, however 'INTG' typically refers to the listed TEC, whilst Lomandra Grassland refers to the general community in all its forms, regardless of condition.



The TEC is unique as it is the only recognised temperate grassland community dominated by tussock-forming species that are not true grasses, and the only location where Lomandra species occur in sufficient density to form a dominant stratum (Turner, 2012). Lomandra species are members of the Liliaceae family.

The floristic composition of INTG includes characteristic iron-grasses in addition to perennial native grasses such as *Aristida behriana*, *Austrostipa* spp., *Rytidosperma* spp. and others. The inter-tussock spaces are filled with herbaceous species which may only be visible seasonally, such as *Arthropodium strictum* (Chocolate Lily), *Bulbine bulbosa* (Bulbine Lily), *Calocephalus citreus* (Lemon Beauty-heads), *Eryngium* spp. (Blue Devil), *Goodenia* spp., *Vittadinia* spp. *Wahlenbergia* spp. (Bluebells) and others. Shrubs form a minor component of some INTG communities, and may include *Bursaria spinosa* (Sweet Bursaria), *Cryptandra amara* spp. (Long-flower Cryptandra), *Enchylaena tomentosa* (Ruby Saltbush) and others (DEWR, 2007).

A number of threatened flora and fauna species are associated with the INTG TEC including Flinders Ranges Worm-lizard (*Aprasia pseudopulchella*), Pygmy Blue-tongue Lizard (*Tiliqua adelaidensis;* INTG), *Cullen parvum* (Small Scurf-pea), *Dodonaea procumbens* (Trailing Hop-bush) (Threatened Species Scientific Committee, 2007).

Remaining remnants of Iron-grass grassland generally occur on gentle slopes of low hills approximately 380 m above sea level and predominantly on loams to clay-loams with an estimated clay content of 30–35 % (DEWR, 2007).

#### 3.2.1.1 Condition Class

The Iron-grass listing criteria (DEWR, 2007) facilitates classification of Iron-grass Natural Temperate Grassland into condition classes based on native plant species diversity, composition, and native perennial tussock density. Three Condition Class categories have been defined, representing high quality remnants (Class A), moderate quality remnants (Class B) and degraded remnants with potential for restoration (Class C) (**Figure 3.1**). An overview of the listing criteria for each Class is provided in **Table 3.1**. Class A and Class B are listed and protected under the EPBC Act, while Class C is not listed or protected, although is considered 'amenable to rehabilitation'.

Table 3.1 Condition Classes for INTG TEC (Turner, 2012)

Condition Class	Minimum Patch Size (ha)	Diversity of Native Plant Species	No. of Broad- Leaved Herbaceous Species in Addition to Identified Disturbance Resistant Species	No. of Native Perennial Grass Species	Tussock Count
Listed ecologica	l community (pro	otected by the El	PBC Act)		
Α	≥ 0.1	> 30	≥ 10	≥ 5	≥ 1/m
В	≥ 0.25	> 15	≥ 3	≥ 4	≥ 1/m
Degraded patch	Degraded patches amenable to rehabilitation (not the TEC and not protected by the EPBC Act)				
С		> 5	No minimum	≥ 1	No minimum



#### 3.2.2 Historical and Current Distribution

The INTG TEC occurs only in SA, where tussock Grasslands dominated by *Lomandra effusa* and/or *Lomandra multiflora* subsp. *dura* occur predominantly in the Northern and Yorke Landscape Management Region, with smaller occurrences in the Murraylands and Riverland Landscape Management Region. Lomandra Grassland is most widespread in the Flinders-Lofty Block Bioregion (Neagle, 2008 in Turner, 2012), with smaller occurrences in the Kanmantoo, Eyre-Yorke Block and Murray Darling Depression Bioregions (Department for Environment and Heritage, 2005 in Turner, 2012).

The area of INTG at the time of European settlement has been estimated at between 750,000 to 1,000,000 ha (Specht, 1972; Hyde, 1995 in Turner, 2012). At the time of listing under the EPBC Act in 2007, the remaining area of INTG of any condition, including highly degraded remnants, was thought to be less than 50,000 ha (Department for Transport, Urban Planning and the Arts, 2000 in Turner, 2012), whilst the area meeting the criteria for the listed threatened ecological community is likely to be substantially less and may be less than 5,000 ha (Hyde, 1995; TSSC, 2007 in Turner, 2012).

#### 3.3 Known and/or Potential Threats

The INTG TEC National Recovery Plan (Turner, 2012) documents known and potential threats to INTG TEC, along with known and/or potential impacts, which are summarised in **Table 3.2**. Note, that not all threats documented in the INTG TEC National Recovery Plan are necessarily relevant to the GNWF Project. All INTG TEC patches are potentially at risk from all the threats summarised in **Table 3.2** (Turner, 2012).

Table 3.2 Known and Potential Threats to INTG and Associated Impacts (Adapted from Turner, 2012)

Known and/or Potential Threat	Known and/or Potential Impact
Lack of awareness	Lack of specific knowledge about the Iron-grass Natural Temperate Grassland ecological community, its appearance, significance and ecological values.
	Lack of awareness/knowledge of appropriate Iron-grass Natural Temperate Grassland management.
	View of native grasslands as low productivity, low value agricultural land requiring 'improvement'.
Changes in land	Incompatible grazing levels and disturbance by stock.
use (including altered grazing	Change of livestock species/breeds and stocking rates resulting in inappropriate grazing levels and disturbance.
regimes).	Complete removal of grazing may lead to increased weed growth and/or a reduction in inter-tussock spaces, which may impact foraging and basking opportunities.
	Intensification of activities (cropping in new areas, pasture improvement, handfeeding or establishment of feed-lots, new water supply/dams for irrigation).
	New industries displacing the ecological community (horticulture, agroforestry, apiary, carbon sequestration programs, revegetation).
	Inappropriate chemical application (herbicides, fertilizers, soil ameliorants).
Weed invasion	Competition for resources (space, nutrient, water).



Known and/or Potential Threat	Known and/or Potential Impact
	Increased dominance of existing weeds species.
	Introduction of new weed species.
	Incompatible weed control techniques (cultivation, chemical, off-target damage).
	Inappropriate choice of species composition and density for revegetation.
Exotic animals and	Overgrazing of grassland flora by exotic and native herbivores.
overabundant	Predation of grassland fauna by exotic carnivores (foxes, cats).
native species	Spread of exotic weeds by animal vectors (foxes, starling).
	Soil disturbance and poisoning of native fauna from inappropriate exotic animal control (rabbit warren destruction, spraying of locust/grassland plague).
New infrastructure and development	Infrastructure for energy and water supplies (buildings, wind generator networks, transmission line poles, underground power cables, pipelines, dams, bores).
	New roads or upgrading of existing roads (widening, re-surfacing).
	Infrastructure development in non-arable areas (sheds, roads, storage facilities).
Inappropriate fire	Inappropriate or altered fire regimes.
regimes	Lack of investigation/knowledge about grassland species response to fire.
	Inappropriate biomass management for fire prevention (slashing too frequently or too low to maintain and protect biodiversity assets).
	Damage to vegetation and soils from fire suppression activities (grading of fire breaks, vehicle access through remnants, application of chemical foam).
Ongoing ecological	Incremental clearance and decline in condition of remnants.
stresses due to	Isolation of remnant populations (barriers to dispersal, inbreeding, edge effects).
past clearance, fragmentation and management changes	Increased competition in remnant population (resources, mortality, loss of pollinators, loss of host plants or animals, disruption of critical life stages, vulnerability to stochastic events).
	Competition with new and existing weeds.
	Over-harvesting of native seeds from grassland remnants due to increased demands.
Climate change	Potential reduction in biomass production.
	Possible escalation of species stresses associated with a drying climate (increased competition for water and other resources, increased mortality, disruption to critical life stages, loss of pollinators, loss of host plants or animals).
	Social impacts on agricultural enterprises in lower rainfall areas (reduced management effort in INTG remnants to cut costs).
	Increased grazing intensity from failure to adapt 'best practice' grazing management strategy.



#### 3.4 Occurrence in the Project Area

A total of 3,107.35 ha of vegetation was mapped as vegetation association (VA) 6: Lomandra Grassland in the broader GNREF. Within the GNWF, a total of 1,931.24 ha of VA6 was mapped, including 18.02 ha of Class A INTG, 1,480.07 ha of Class B INTG, and 307.63 ha of Class C INTG (**Table 3.3**). INTG was mapped predominantly in the WF (~1,792.07 ha), but also along the OTL (~139.17 ha).

Table 3.3 Occurrence of INTG Within the GNWF Project Area and Disturbance Footprint

INTG Class (A, B or C)	INTG TEC (Yes/No)	GNWF Project Area (ha)	GNREF Total (ha)	Impacted by DF (Yes/No)	DF (ha)	% of GNWF INTG Impacted
INTG Class A	Yes	18.02	18.02	No	0.00	0.00
INTG Class B	Yes	1,480.07	1,923.32	Yes	6.14	0.42
INTG Class C	No	307.63	307.63	Yes	2.44	0.79
Unsurveyed Lomandra Grassland	-	125.51	858.38	No	0.00	0.00
Total Area of Lom Grassland in GNV		1,931.24	3,107.35	-	8.59	0.44
Total Maximum T Class A, B)	EC (includes	1,498.09	1,941.34	-	8.59	0.41

<sup>\*</sup>Minor discrepancies in sum values are due to rounding.

Due to the poor seasonal conditions present at the time of the detailed vegetation surveys, patches of Lomandra Grassland were not assessed using criteria listed in the INTG TEC National Recovery Plan (Turner, 2012). Indicators such as number of perennial grass species was difficult to assess, as grasses could not be distinguished to species level due to poor seasonal conditions and factors such as heavy grazing impacts and in some areas, previous fire impacts. Similarly, native species diversity counts were not limited to a  $50 \times 50$  m quadrat but assessed using the Bushland Assessment Methodology (BAM) in a 1-ha area. Despite the poor conditions, approximately half of the sites surveyed using BAM methodology were close to meeting the Condition Class B requirements.

Additional targeted surveys were undertaken in spring 2024, to assess the condition of patches of Lomandra Grassland which intersected with the Disturbance Footprint current at the time of the survey. A total of 23 sites were assessed for INTG condition class according to the criteria outlined in the Conservation Advice and INTG TEC National Recovery Plan.

A total of 72 native flora species and 41 introduced flora species were recorded within the 23 survey sites. One site was determined to be Class A INTG, 14 sites were determined to be Class B INTG, and the remaining 8 sites were determined to be Class C INTG.

One site (LOM12) was found not to meet the criteria for listing as INTG, as it did not contain a high enough coverage of *Lomandra* spp. (>10%). LOM22 was mapped as Class C INTG due to the high relative cover of *Lomandra* spp., however the site did not meet the typical structural description of the community, having high cover (>10%) of chenopod shrub species including *Maireana rohrlachii* and *Maireana brevifolia*, with intermittent dense patches of *Hakea leucoptera*. Vegetation mapping for the Project Area was adjusted to incorporate these changes.



The precautionary principle was applied to two sites which came close to meeting the condition criteria for listing as Class B INTG. LOM10 met all criteria except the number of disturbance resistant broad-leaf herb species, containing only two of the three required to meet the criteria for Class B INTG.

An overview map of the INTG, the 23 targeted INTG sites, and Bushland Assessment Sites within the GNREF and GNWF is provided in **Figure 3.1**. For full details of the Targeted INTG survey refer to the INTG TEC Assessment Report (Umwelt, 2025b).

Desktop mapping was used to separate INTG into a total of 51 'separate' patches defined by landholder boundaries. Where patches intersected with a targeted Lomandra assessment site or BAM site, the condition at that site was applied the patch, even if split by landholder boundaries. If no survey was undertaken in a patch, it was labelled as 'unsurveyed'. The 51 patches are described in **Appendix 1** and displayed (without labelling) on **Figure 3.2.** 

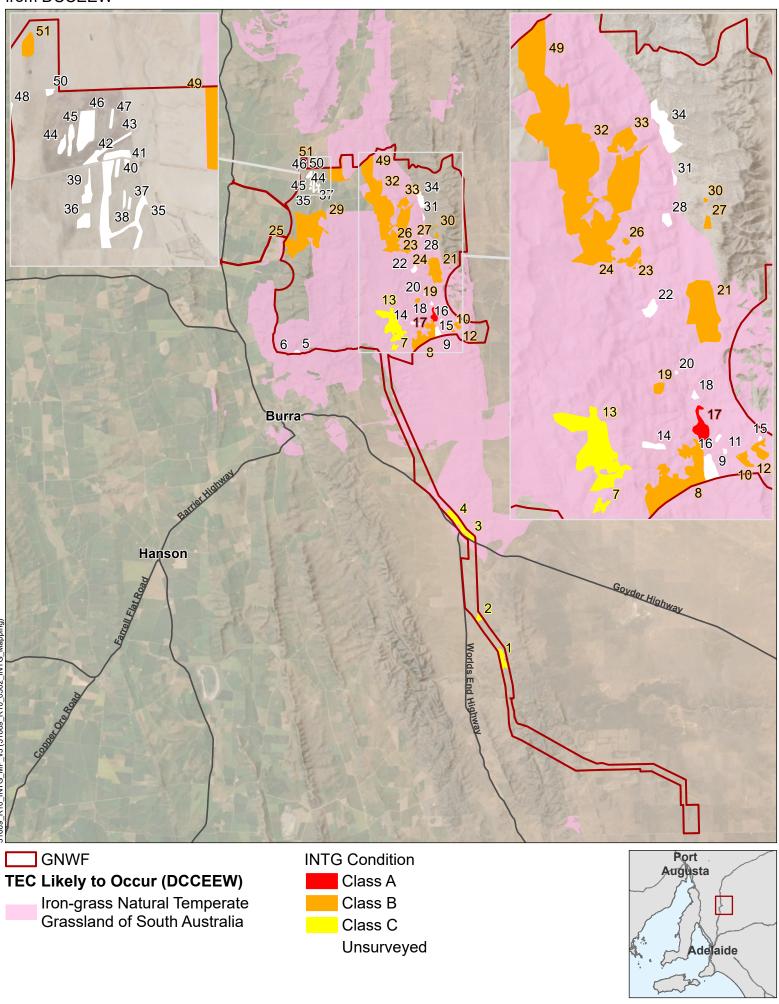
Of these, 16 patches (totalling 1,480.07 ha) comprise Class B Lomandra, of which nine patches (accounting for 6.14 ha) are being impacted directly by clearance associated with the Disturbance Footprint, including 2.43 ha of permanent and 3.72 ha of temporary clearance. A further six patches comprise Class C INTG (totalling 307.63 ha of which 2.44 ha is being impacted in directly by the Disturbance Footprint (1.14 ha permanent, 1.30 ha temporary)), and one Class A INTG patch (totalling 18.02 ha, none of which is being impacted by the Disturbance Footprint).

Figure 3.1 INTG Assessment Sites and Condition Class Mapping D<sub>6</sub>b **LOM23** A6g D6a LOM18 LOM19 A6a LOM17 LOM1 LOM16 ALOM2 A6f △LOM28 A6b LØM3 LOM LOM14 LOM9 LOM8 LOM13 **LOM10** A6c Burra A6e LOM24 LOM26 Hanson Goyder Highway LOM27 LOM22 **GNREF** Lomandra BAM site Class B **GNWF** Class C **INTG Condition** △ Lomandra survey site Class A Unsurveyed Data Source: Umwelt (2025) GDA2020 MGA Zone 54



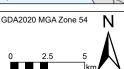


Figure 3.2 Overview of INTG TEC Within GNWF. The map also shows the TEC likelihood mapping sourced from DCCEEW





Data Source: Umwelt (2025), ESRI (2025), DEW (2022), DIT (2022) Neoen (2025) Date Exported: 21/08/2025 11:00 AM Created by: sophie.haswell COPYRIGHT: Use or copying of this map in whole or in part without the written permission of Umwelt constitutes an infringement of copyright. LIMITATION: This map has been prepared on behalf of and for the exclusive use of Umwelt's Client, and is subject to and issued in connection with the provisions of the agreement between Umwelt and its Client. Umwelt accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this map by any third party.





## 4.0 Impacts to INTG TEC

#### 4.1 Project Disturbance Footprint

Based on the current Project design, the GNWF will directly impact (clear or remove) a total of up to 6.14 ha of the Critically Endangered TEC (INTG Class B), including 2.43 ha of permanent clearance and 3.72 ha of temporary clearance (**Table 4.1**). A further 2.44 ha of Class C INTG is proposed to be impacted by the Disturbance Footprint.

These values represent a worst-case assessment of impacts expected, and through ongoing design refinements, and mitigations, Neoen will seek to further reduce these impacts during all phases of the development. A Development Envelope (approx. 200 m buffer around Disturbance Footprint) is proposed to allow micro siting of the design and application of the Mitigation Hierarchy to avoid and minimise impacts to areas where INTG TEC occurs.

Although there is one patch of Class A INTG TEC in the GNWF Project Area, this patch is not within the Disturbance Footprint or Development Envelope and is therefore not directly or indirectly impacted by the Project.

The areas of direct impact are displayed in Figure 4.1 and Figure 4.2.

A summary of the likely direct impacts and potential indirect impact pathways to INTG TEC associated with development (i.e. construction) and/or operation of the GNWF Project, are presented in **Table 4.2.** 

Table 4.1 INTG Within the GNWF Disturbance Footprint

Project Element	Condition Class	Permanent (ha)	Temporary (ha)	Total (ha)	Comments
WF	Α	0.00	0.00	0.00	No direct or indirect impact to occur.
	В	2.43	3.72	6.14	Areas temporarily cleared will be allowed to regenerate following clearance required for construction.
	С	0.68	0.39	1.07	Class C does not meet the criteria for listing as a TEC but will be managed as such under this INTG MP.
OTL	Α	0.00	0.00	0.00	No direct or indirect impact expected to occur
	В	0.00	0.00	0.00	as no Class A or Class B INTG was mapped along OTL.
	С	0.46	0.91	1.37	Class C does not meet the criteria for listing as a TEC but will be managed as such under this INTG MP.

Note: Minor discrepancies in reported values are a result of rounding.

Figure 4.1 INTG Impacted by the Disturbance Footprint Across the Project Area (1 of 2) GNWF **INTG** Condition Class C ☑ Disturbance Footprint Unsurveyed Class A Class B Existing road



Data Source: Umwelt (2025), ESRI (2025), DEW (2022), DIT (2022) Neoen (2025), DEVY (2022), DIT 
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Figure 4.2 INTG Impacted by the Disturbance Footprint Across the Project Area (2 of 2) L Highway



INTG Condition
Class C



GDA2020 MGA Zone 54



### 4.2 Direct and Indirect Impacts

A summary of the likely direct impacts and potential indirect impact pathways to INTG TEC associated with construction and/or operation of the GNWF Project, are presented in **Table 4.2**.

Table 4.2 Likely Direct Impacts and Potential Indirect Impact Pathways to INTG TEC During Construction and Operation of the GNWF

During Construction	During Operation	Comment
Likely Direct Impacts		
Direct loss of up to 6.14 ha of Class B TEC and 2.44 of Class C INTG (not currently representative of the TEC, but with potential for rehabilitation) through vegetation clearance for construction purposes.	None	Neoen are seeking to continue to minimise these direct impacts through design refinements throughout development and construction. In addition, the location of infrastructure, including, but not limited to, vehicle access tracks, WTGs and underground electrical reticulation (installed via trenching), will be micro sited within the Development Envelope away from INTG TEC, when practicable during pre-construction surveys to further avoid and/or minimise direct impacts.
Potential Indirect Impacts		
Clearance of INTG TEC outside the approved clearance area.	Clearance of INTG TEC outside the approved clearance area (i.e. via maintenance of existing infrastructure).	Avoidable through specific controls and management measures outlined in in this Plan as well as the Construction Environmental Management Plan (CEMP) and the / Operational Environmental Management Plan (OEMP).
Loss of topsoil and subsequent erosion in areas adjacent to INTG patches, which may lead to impact within the TEC.	None	Avoidable through specific controls and management measures outlined in this Plan, the CEMP, OEMP and sub-plans such as Erosion and Sediment Control Plan (or similar).



During Construction	During Operation	Comment
Sedimentation of INTG TEC from construction run-off (soil).	None	Avoidable through specific controls and management measures outlined in this Plan, the CEMP, OEMP and sub-plans such as Erosion and Sediment Control Plan (or similar).
Altered hydrology (due to altering of drainage lines through excessive runoff).	None	Avoidable through specific controls and management measures outlined in this Plan, the CEMP, OEMP and sub-plans such as Erosion and Sediment Control Plan (or similar).
Dust emissions smothering flora and suppressing photosynthesis.	None	Short term potential impact during construction only, which can be minimised through specific controls and management measures outlined in this Plan, the CEMP, the OEMP and associated subplans.
Altered grazing regimes (increased grazing, preferential grazing, reduction or loss of grazing, altered grazing times).	Altered grazing regimes (increased grazing, preferential grazing (e.g. under turbine shade), reduction or loss of grazing, altered grazing times).	Difficult to predict likelihood and/or level of occurrence and likely consequences.  During construction, any potential impact is expected to be short-term in nature and temporary.  However, any potential impacts identified by the landholder will be reported to the relevant personnel (i.e. community liaison officer) and corrective action undertaken if required.
Introduction of new weeds to the Project Area, or increase in weeds, through use of contaminated construction material, machinery and vehicles, leading to loss of vegetation condition.	Introduction of new weeds to the Project Area, or increase in weeds, through foot-traffic, light vehicles and other machinery that may be required during the operational phase (limited/minimal) leading to loss of vegetation condition.	Avoidable through specific controls and management measures outlined in this Plan, the CEMP, OEMP and associated sub-plans such as Flora Management Plan and Weed Management Plan.
Stockpiling of equipment and materials and introduction of rubbish and waste materials causing degradation to the integrity of the grassland.	None	Avoidable through specific controls and management measures outlined in this Plan, the CEMP and the OEMP.



During Construction	During Operation	Comment
Chemical spills (e.g. fuel/diesel) leading to loss or reduction of vegetation condition.	Chemical spills (e.g. fuel/diesel) leading to loss of vegetation condition.	Avoidable through specific controls and management measures outlined in this Plan, the CEMP and the OEMP.
Vehicles and/or machinery driving on INTG TEC outside of approved clearance areas and tracks.	Vehicles and/or machinery driving on INTG TEC outside of approved clearance areas and tracks.	Avoidable through specific controls and management measures outlined in this Plan, the CEMP and the OEMP.



### 4.3 Mitigation Measures to Avoid and / or Minimise Potential Direct and Indirect Impact to INTG TEC

Project infrastructure has specifically been designed and/or located to avoid direct impact to INTG TEC as much as possible through application of the Mitigation Hierarchy. Ongoing application of these mitigation measures will seek to avoid direct impacts even further. The current assessment represents a worst-case scenario in terms of potential impacts.

In addition, the location of infrastructure, including, but not limited to, vehicle access tracks, WTGs and underground electrical reticulation (installed via trenching), will be micro sited (i.e. moved and / or adjusted slightly) within the Development Envelope away from INTG TEC, wherever possible, prior to commencement of construction works to avoid and / or minimise direct impacts to INTG. Infrastructure will not be micro sited if doing so does not result in a reduction of potential impacts to INTG TEC. Neoen also commits that micro siting will not increase impacts to INTG and/or any other MNES, including, but not limited to Pygmy Blue-tongue Lizards (INTG) and INTG habitat, as detailed in a site specific INTG Management Plan (sub-plan) (Umwelt, 2025).

Furthermore, while the Project has the potential to cause indirect impacts to INTG TEC, such as, but not limited to, erosion, sedimentation, dust and weeds, these indirect impacts will be avoided and/or minimised during construction and operation of the Project via implementation of specific controls contained within this INTG TEC Management Plan (Section 9.0 and Section 10.0). Lessons learnt on mitigating potential impacts on INTG TEC from the Goyder South Hybrid Renewable Energy Facility Project, will be adopted and applied to the GNWF Project if relevant.

Avoidance and mitigation measures implemented during detailed design, and those proposed as part of ongoing project refinements, as well as during construction and operational phases, are outlined in **Table 4.3.** 

Table 4.3 Avoidance and Mitigation Measures Applied and Proposed

Avoidance / Mitigation Measure	Description	Effectiveness
Pre-construction / Design		
Site selection	Original site selection was based on: the world-class wind resource proximity to major transport routes and existing grid infrastructure location on the edge of Goyder's Line in marginal agricultural cropping land which had historically been cleared and utilized for grazing the rural location with low population density, reducing visual and noise impacts.	High – the Project Area is situated in an area of relatively low economic, ecological and social value.
Vegetation surveys	Multiple surveys have been conducted at various points in the Project design and development stage, including: Early broad mapping of the site vegetation, condition and quality.	High - determined areas of higher quality Lomandra Grassland and enabled early avoidance, with provision of ecological constraints mapping and risk analysis (EBS Ecology, 2023a; EBS Ecology, 2023b). This resulted in refinement to focus on



Avoidance / Mitigation Measure	Description	Effectiveness
Pilitigation Measure	Detailed vegetation surveys using BAM to refine mapping and confirm condition, suitable for Native Vegetation Clearance Data Report under SA Legislation.  Targeted INTG TEC surveys within Disturbance Footprint and Development Envelope to refine mapping and measure against condition class criteria, to inform further micro siting and management.  This approach ensured that all INTG was mapped and avoided as much as practicable in the first instance, with the precautionary principle applied to indicate that all Lomandra Grasslands could constitute the TEC.	developing the southern portion of the GNREF, effectively avoiding the large area of INTG concentrated in the northern portion of the GNREF, which accounts for over 37.85% of the INTG mapped in the GNREF, despite the northern portion of the GNREF accounting for only 17.55% of the overall Project Area.  This also resulted in a reduction of impact to INTG (all condition classes) from 41 to 16 proposed WTGs in the preliminary design and careful placement of roads and cables to avoid fragmenting areas of INTG. From this revised and reduced turbine layout, a civil design of the likely road locations and hardstand extents was developed, by adopting 'exclusion areas' where possible for identified high quality (likely INTG) areas. This methodology effectively avoided impacts to the INTG TEC by ensuring the design avoided these areas as much as possible.  Subsequent targeted INTG surveys in spring 2024, ensured that all areas of INTG proposed to be impacted have been surveyed in detail, resulting in accurate condition class assessment. This resulted in more refined avoidance once classification against the INTG TEC Condition Class Criteria had been undertaken.
Alignment with existing infrastructure	The Project Area has been sited to align wherever practicable with existing cleared areas including roads, infrastructure and cropped land. If roads or electrical cables are required to cross large patches of Lomandra Grassland to access WTGs, they have been placed in the narrowest (i.e. least impact) area. In some cases, alternative access track routes appear available, however, constraints associated with electrical cabling and distance from the substation and BESS, mean that alternative routes are not technically feasible unless access tracks and cables are constructed separately. As cables have been designed to align within temporary clearance areas of existing access tracks, to minimise clearance, the overall impact on native vegetation, as well as fragmentation, is reduced in these instances. Multiple design iterations showing avoidance and minimization to	High – Neoen has investigated design measures to minimize impacts in unavoidable locations. Neoen further demonstrated ongoing commitment to application of the mitigation hierarchy in August 2025, when a further improvement was implemented by rerouting an access track. Additional reductions were also made to Class C INTG at several other locations in the WF and OTL.  Approximately 82.95 ha (46.24 ha permanent, 36.71 ha temporary) (or ~15.45%) of the total impact area occurs in non-native vegetation including:  36.31 ha of existing roads or other clearance.  28.85 ha of cropped land.



Avoidance / Mitigation Measure	Description	Effectiveness
	INTG as specified above are displayed in Figure 4.1 and Figure 4.2.	
	Aligning electrical layout with temporary footprint associated with existing roads and proposed access tracks.	High- approximately 8.44 ha of INTG habitat avoided through this method. Note: not directly comparable due to the maturity of the design.
	Utilising existing access track infrastructure for GSWF OTL to reduce access track requirements for GNWF OTL.	Moderate - 0.72 ha of INTG (Class C) avoided using this method.
Non-conventional stringing methods	Removal of stringing corridor in areas of high value MNES habitat through application of non-conventional stringing methods (i.e. helicopter stringing).	High - Approximately 3.02 ha of INTG (Class C) avoided through this method.
Construction		
Construction Environmental Management Plan	A comprehensive document with multiple associated sub-plans which aim to avoid or minimise indirect impacts from construction such as through dust emissions, erosion, altered hydrology and general site matters. Includes measures for spatial data system to minimise the chance of unauthorised or incorrect clearance areas. Specific measures outlined below.	High - Indirect impacts effectively avoided.
	INTG TEC outside of the approved clearance area (all condition classes) to be clearly defined as an ecologically sensitive area of detailed maps and spatial data applications supplied to construction contractors.	High – direct impacts minimized, indirect impacts effectively avoided.
	During construction, implement weed hygiene practices including vehicle checks and washdowns as required on vehicles or plant entering the construction site.	High – indirect impacts effectively avoided.
	During construction, undertake monthly weed surveillance monitoring targeting WoNS and Declared weed species, with follow up controls required for identified weed outbreaks. Weed control	High – indirect impacts effectively avoided.
INTG Management Plan	Specific document intended as a sub-plan of CEMP which details procedures to further avoid as well as minimize direct impacts and mitigate potential indirect impacts to INTG. Including but not limited to:  Reduced speed limits (25 km per hr within 50 m of Class B INTG, and max 40 km/hr elsewhere).	High - direct impacts minimised. Indirect impacts effectively avoided.



Avoidance / Mitigation Measure	Description	Effectiveness
	Clearly delineate avoidance areas and ecological no-go zones.	
	Unexpected finds procedure (i.e. stop work).	
	<ul> <li>Detailed site specific inductions for all staff and contractors related to INTG TEC, its legislative significance, potential impacts and management measures.</li> </ul>	
	<ul> <li>Detailed fact sheets at designated locations throughout operations and maintenance facilities and site offices.</li> </ul>	
	<ul> <li>Toolbox meetings with INTG highlighted.</li> </ul>	
	Weed control in accordance with minimum disturbance techniques.	
Pre-clearance Checks (PCC)	PCC in all areas of Project Area which contain INTG, with the aim to identify locations in which micro siting may effectively reduce impacts.	Moderate - Allows for micro siting to further minimise impacts and ensures any unexpected finds are reported and managed.
Micro siting infrastructure	Pre-construction micro siting surveys: Prior to commencing construction work (such as, but not limited to, clearing and grubbing and excavation) within Class B and Class C INTG TEC, the head construction contractor will work with specialist advisors (i.e. ecologists) to undertake a micro siting process to micro site (relocate) infrastructure to avoid and/or minimise impacts to Class B and Class C INTG TEC, where possible. No construction works will commence until approval has been provided in accordance with a dedicated the Permitting System.	No net increase in impact to INTG. Micro siting will only be considered if it reduces impact on MNES.
Rehabilitation	The area of temporary clearance in INTG will be rehabilitated using best practice methods, as soon as practicable following disturbance (within two years). Areas of temporary disturbance are included in state and federal approvals to ensure that any offsets are above and beyond what is required to achieve a net environmental gain for the TEC.	High – 5.02 ha (58.44 %) of disturbed INTG will be rehabilitated following construction.
Operation		
Operational Environmental Management Plan	Management measures enforced to ensure no unforeseen direct or indirect impacts occur to INTG during the operational phase of the GNWF. Includes	Ensures direct impacts to INTG during operational works are avoided and indirect impacts are minimised through appropriate management measures.



Avoidance / Mitigation Measure	Description	Effectiveness		
	weed management, speed limits and rehabilitation monitoring.			
EPBC Offset	EPBC Offset provides net gain for INTG in the region. Aim to rehabilitate and improve existing areas of INTG and implement formal protections to secure and improve in perpetuity.	Provides measurable conservation gain fo INTG.		
Monitoring	Areas of temporary clearance will be monitored annually to assess trajectory of rehabilitation and to identify if any triggers for further action (adaptive management) are identified.	s classes) is on positive trajectory to return		
Decommissioning				
Reassessment and further surveys	To be developed at time of decommissioning. Likely to include targeted INTG surveys, Significant Impact Assessment (under relevant legislation and guidelines at the time of decommissioning) and approvals, if required.	Follows regulatory process relevant at the time of impact.		

## 4.4 Estimated Residual Impact to INTG Within the Project Area

While Project infrastructure has specifically been designed and/or located to avoid impact to INTG TEC as much as possible, current assessment of Project design information, specifically the Disturbance Footprint, has determined that the Project will directly impact (clear or remove) up to 6.14 of Class B INTG TEC (as summarised previously in **Section 4.1** and **Table 4.1**), based on the Disturbance Footprint, noting that this is a worst-case assessment of impacts and efforts to reduce this through further design refinements will continue to occur. This includes 2.43 ha of permanent disturbance and 3.72 ha of temporary disturbance, within which indirect impacts are expected to be contained, and thus accounted for.

#### 4.4.1 Offset

Neoen is committed to establishing high-quality on-ground offsets for any impacts to native vegetation and Matters of National Environmental Significance (MNES) to fulfill requirements under both the NV Act and the EPBC Act. Neoen is also committed to rehabilitating all temporarily disturbed areas above and beyond the offset requirement which translates to rehabilitating 58.44% of the total footprint in addition to offsetting 100% of the footprint. Neoen is not seeking an offset obligation reduction that could have translated to a \$1-2m saving, demonstrating commitment to generating a net positive outcome.

Neoen has secured a Significant Environmental Benefit (SEB) offset site to compensate for approximately half of the NV Act offset obligations, for impacts to native vegetation. The SEB offset site is located to the northeast of the GNWF Project Area and comprises approximately 1,300 ha of formerly agricultural grazing land with a mixed covering of vegetation associations similar to those



mapped within the GNWF Project Area. This includes up to 44.94 ha of Lomandra (Iron-grass) grassland, which may constitute the INTG TEC. This, and the remainder of the SEB site will be managed to improve vegetation condition, as required under the NV Act, to offset approximately half of the proposed native vegetation disturbance and will compensate for impacts to Lomandra grassland (all condition classes) as required under the NV Act. An NV SEB Offset Management Plan has been developed for this area.

Neoen is also developing an additional EPBC Offset Proposal and Management Plan to offset residual impacts to INTG under the EPBC Act. Investigations are currently ongoing to secure an additional suitable site that will be utilized as an EPBC Offset Area. It is proposed to use an existing patch (or patches) of Class C INTG TEC within the GNWF Project Area (listed in **Appendix 1**), which will be protected, maintained, and improved to achieve a measurable conservation gain and potential improvement in condition to Class B. An INTG EPBC Offset Management Plan will be developed for the final selected EPBC Offset site(s).

Refer to the Goyder North Wind Farm EPBC Offset Strategy (Umwelt, 2025c) for more detail.



# 5.0 Implementation of INTG TEC Management Plan

This INTG TEC Management Plan is proposed to be implemented as a sub-plan of the CEMP (Umwelt 2025 – *in draft*). It is anticipated that the CEMP will be implemented during the construction phase of GNWF to reduce any associated adverse environmental impacts and satisfy regulatory requirements.

The CEMP will cover off on the following aspects:

- Work stages (schedule of works).
- Environmental management system.
- Project commitments and regulatory requirements.
- Roles and responsibilities.
- Implementation:
  - Induction;
  - Meeting and communication;
  - Monitoring, inspections and auditing;
  - Reporting;
  - o Review;
  - Permit system (also outlined below);
  - o Incident reporting and non-compliance;
  - Complaints procedure;
  - Management of sub-contractors; and
  - o Records distribution and control.
- Management and mitigation measures.
- Management sub-plans.



## **5.1** Permit System

The CEMP includes implementation of a Permit System as follows (Umwelt, 2025 - in draft).

Site inspections will be used to control work activities on site. To proceed with work (that involves ground disturbing activities, such as, but not limited to clearing and grubbing and excavation), in an undisturbed area an inspection will be required, and this will need to be signed off by the Project, Construction or Environmental Manger for works to proceed. Following the same process an inspection can bring about a stop work when signed off by the Project, Construction or Environment Manager.

This Permit System will be used in conjunction with the pre-construction micro siting procedure presented in **Section 9.1**, to ensure that work in an undisturbed area (such as, but not limited to, clearing and grubbing, and excavation) will not commence until initial site inspection and subsequent micro siting of infrastructure to avoid and/or minimise impacts to INTG TEC, has been completed and approval provided for works to commence.

### 5.1.1 Construction

Clearance approval: Approval to clear native vegetation to be granted in accordance with Regulation 12, Schedule 1; Clause 34 of the Native Vegetation Regulations 2017 and Section 25A of NV Act (Ref. XXXX/XXXX). [Placeholder: to be updated in final].

There are specific conditions associated with the various Approvals which should also be understood (refer to the approvals for details).

- EPBC Approval Conditions relevant to INTG TEC are listed in Section 2.0 and in Table 2.2.
- NV Act Approval Conditions relevant to the INTG TEC are listed in Section 2.0 and in Table 2.3

### 5.1.2 Operation

Clearance approval: Maintenance of the existing permanent Disturbance Footprint can be continued in accordance with Regulation 8(2) – Maintenance of infrastructure. Refer to the *Native Vegetation Regulations 2017* for specific requirements.

Further clearance such as additional infrastructure, additional tracks or other new clearance will require assessment under a new clearance pathway under the Native Vegetation Regulations 2017 and NV Act and may require clearance notification and/or additional approval.

## 5.2 INTG MP Roles and Responsibilities

As stated previously the INTG MP is proposed to be implemented as a sub-plan of the CEMP which will be implemented during the construction phase of the GNWF Project. As outlined in the CEMP, both Neoen and the Construction Contractor (within the Engineering, Procurement and Construction (EPC) Contractor) have a role in implementing the requirements of the CEMP, and associated sub-plans, such as this INTG MP. Refer to the CEMP for more detail on the roles and responsibilities of Neoen and the Construction Contractor and sub-contractors.



Once the construction phase has been completed, this INTG MP is proposed to be implemented as a sub-plan of the Operational Environmental Management Plan (OEMP), which will be implemented by The Project Owner (Neoen) and the Project's Operation and Maintenance Contractors.

It is anticipated that there will be three main roles associated with implementation of this Plan, the Construction Project Manager / Asset Manager (Neoen); the EPC Contractor and an Ecological Consultant (Contractor). The specific personnel fulfilling these roles may change over time, particularly across the lifetime of the Project. The aspects and/or tasks that each role is likely to be responsible for are outlined in **Table 5.1**.

Project employees, contractors and sub-contractors will also have a role, as will the Department, which is also outlined in **Table 5.1**. Note that the specific responsibilities for each management measure during construction, operation and monitoring are provided in **Section 9.0**, **Section 10.0** and **Section 11.0** 

Table 5.1 Roles and Responsibilities

Role	Aspects and / or Tasks the Role is Responsible for
Construction Project Manager / Asset Manager (Neoen)*	• Currently Neoen is the project developer and is responsible for the planning of the entire GNWF Project, including seeking and obtaining relevant planning and environmental approvals under State and Federal legislation, as well as construction and operation of the Project. Neoen intends to own and operate the GNWF Project in the future.
	The Construction Project Manager / Asset Manager (Neoen)* will be responsible for implementing this Plan.
	• It is anticipated that the Construction Project Manager / Asset Manager (Neoen)* will engage a suitably qualified Ecological Consultancy to assist with rehabilitation of temporary clearance areas, monitoring and reporting. However, implementation of this Plan will remain the responsibility of the Construction Project Manager / Asset Manager (Neoen)*.
	The Construction Project Manager / Asset Manager (Neoen)* must ensure that they do not commence operation** of the Project unless the Plan has been approved by the Minister in writing.
	Should the Construction Project Manager / Asset Manager (Neoen)* change in future, implementation of this Plan will remain the responsibility of whoever is the Construction Project Manager / Asset Manager (Neoen)*.
EPC Contractor	The EPC Contractor is constructing GNWF Project and is responsible for implementing the CEMP, and sub-plans such as this INTG Management Plan. As such, the EPC Contractor will also be responsible for implementing this Plan during construction, including the management measures associated with construction works. Key roles under the EPC Contractor are described in the CEMP (Section 9.0). Briefly, roles include Project Director, Project Manager, Project Engineer, Construction Manager, Environmental Manager, Health Safety and Environmental (HSE) Officer and Construction Contractor. Roles may vary depending on the EPC Contractor selected.
Ecological Consultant (Contractor)	It is proposed that a suitably qualified and experienced Ecological     Consultant (Contractor) will be responsible for assisting the Construction     Project Manager / Asset Manager (Neoen)* to implement this Plan.
	The same Ecological Consultant (Contractor) is likely to be required to undertake monitoring and reporting activities and likely to be responsible for reviewing and analysing monitoring data and results to determine the success (or failure) of management actions and recommending refinement/improvement, if required.



Role	Aspects and / or Tasks the Role is Responsible for				
Project Employees, Contractors and Sub- contractors	<ul> <li>All Project employees, contractors and sub-contractors are responsible for ensuring work is undertaken in accordance with this plan, including reporting any incidents, such as unexpected finds of INTG or unauthorised clearance or damage to INTG outside of the approved Disturbance Footprint, to the Construction Contractor, Health Safety Environment (HSE) Manager and/or Construction Project Manager / Asset Manager (Neoen)*, who shall report it as an environmental incident and undertake an environmental incident investigation (in accordance with</li> </ul>				
The Department and the Minister	<ul> <li>Review and approve this Plan (if appropriate).</li> <li>Review and approve a revised version of this Plan (if required).</li> </ul>				

<sup>\*</sup>The Construction Project Manager (Neoen) will change to Asset Manager (Neoen) once Practical Completion is achieved under the Engineering, Procurement and Construction Contract. \*\*Refer to the Glossary and Abbreviation of Terms for a definition of 'operation'.

## 5.3 Risks to Implementation of this Plan

There are several potential risks to achieving this Plan's environmental objectives, detailed in the CEMP (Umwelt, 2025 - in draft). Risks specifically relevant to This Plan, include:

- Indifference and/or lack of understanding of requirement for this Plan (EPBC Act approval conditions) leading to poor implementation of this Plan.
- Change of wind farm owner and/or operator (potentially leading to poor implementation of this Plan).
- Change of staff responsible for implementation of this Plan over the life of the Project (Construction and Operation) (i.e., Construction Project Manager / Asset Manager (Neoen)) and lack of understanding of requirements within this Plan.
- Change of Ecological Consultancy assisting Neoen to implement this Plan and lack of understanding of requirements within this Plan.

These risks are detailed in Section 7 of the CEMP (Umwelt, 2025 - in draft), along with further commentary on each risk, the likelihood rating of each risk occurring, the consequence rating of each risk, the overall risk rating, risk management strategies and/or proposed contingency measures and who will be responsible for managing the risk.

## 5.4 Review and Revision of this Plan

This INTG Management Plan is proposed to be reviewed and updated as required during construction and/or operation of the Project, for example if circumstances change, approvals are varied, or to incorporate alternate management measures or methods, such as new technologies.



### 5.5 Submission and Publication of this Plan

Section 143A of the EPBC Act allows the approval holder to submit a revised action management plan (RAMP), such as this INTG Management Plan, to the Minister for approval at any time. In anticipation of the approval conditions being implemented, a revised action management plan will be submitted to the Minister for approval unless the conditions state otherwise. Specifically, if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact, the approval holder may choose to revise the action management plan without submitting it for approval under section 143A of the EPBC Act.

As such, any revisions of this Plan will be submitted to the Department either for information or for approval by the Minister, in accordance with the anticipated conditions of approval. Furthermore, any revisions of this Plan will be published on the Project's website as required by the anticipated conditions of approval. It will remain on the Project's website until the end date of the relevant EPBC Act approvals.

If Neoen decides to revise this Plan without submitting it for approval by the Minister, Neoen will:

- Notify the Department in writing that the approved action management plan has been revised and provide the Department with:
  - a. an electronic copy of the RAMP (i.e., this Plan);
  - b. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP;
  - c. an explanation of the differences between the approved action management plan and the RAMP;
  - d. the reasons Neoen considers that taking the action in accordance with the RAMP would not be likely to have a new or increased impact; and
  - e. written notice of the date on which Neoen will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the Department.

Neoen will implement the RAMP from the RAMP implementation date.



# 6.0 Risk Assessment of Potential Impacts

The potential impacts involved with construction of the Project, are outlined in the following sections for each relevant environmental aspect. The primary objective for management of each aspect is included, along with broad management measures for the design and construction phases of the Project to minimise potential adverse impacts.

For each environmental aspect, each potential impact has been numbered and given a rating in terms of likelihood (**Table 6.1**) and consequence (**Table 6.2**), which are then combined to generate a risk rating (**Table 6.3**), associated with likely management actions (**Table 6.4**). The likelihood and consequence ratings have been assessed prior to consideration of any control measures.

Table 6.1 Likelihood of Risk Occurring

Likelihood	Description	
Almost Certain	Expected to occur in most circumstances	
Likely	Will probably occur in most circumstances	
Possible	Might occur occasionally	
Unlikely	Could occur at some time, but unlikely	
Rare	May occur only in exceptional circumstances	

Table 6.2 Consequence of Risk Rating

Consequence	Description
Insignificant	Minor incident of environmental damage that can be reversed
Minor	Isolated but substantial instances of environmental damage that could be reversed with intensive efforts
Moderate	Substantial instances of environmental damage that could be reversed with intensive efforts
Major	Major loss of environmental amenity and real danger of continuing, with regulatory concerns.
Severe	Severe widespread loss of environmental attribute and irreversible environmental harm

Table 6.3 Risk Assessment Matrix

Consequence ® Likelihood -	Insignificant (no impact)	Minor (low impact, localised)	Moderate (manageable, some environmental harm)	Major (significant damage, regulatory concerns)	Severe (catastrophic impact, irreversible harm)
Rare (highly unlikely)	Low	Low	Low	Medium	High



Consequence ® Likelihood -	Insignificant (no impact)	Minor (low impact, localised)	Moderate (manageable, some environmental harm)	Major (significant damage, regulatory concerns)	Severe (catastrophic impact, irreversible harm)
Unlikely (could happen, but not likely)	Low	Low	Medium	High	High
Possible (might occur at some point)	Low	Medium	Medium	High	Extreme
Likely (expected to occur)	Medium	Medium	High	High	Extreme
Almost certain (occurs frequently)	Medium	High	High	Extreme	Extreme

Table 6.4 Management Actions Required for Each Risk Rating

Risk Rating	Management Actions Required
Low	Acceptable risk level with infrequent review. Standard control and monitoring measures to be identified and implemented. Monitor and review locally as necessary. Report to local manager(s).
Medium	Acceptable risk level but must be reviewed regularly. Specific control and monitoring measures to be identified and implemented. Measures and risk level to be reviewed and improved as further information becomes available.
High	Undesirable risk level – consultation with manager(s) prior to activity. Specific control and monitoring measures to be identified and implemented. Measures and risk level to be reviewed and improved as further information becomes available.
Extreme	Unacceptable risk level. Do not proceed with activity. Requires immediate attention and consideration. Detailed risk assessment and management plan to be prepared by relevant senior manager(s) or suitably qualified consultant. Strict control and monitoring measures to be identified and implemented. Any action that has, will have, or is likely to have a significant impact on matters of national environmental significance requires referral under the EPBC Act.

**Table 6.5** and **Table 6.6** detail the risk assessment for potential impacts during construction and operation, respectively. Implementation of specific construction and operational management measures (outlined in **Section 9.0** and **Section 10.0**) for each identified risk to INTG TEC, is expected to avoid and/or minimise the potential impacts and as such, reduce the risk rating. Therefore, a residual risk rating is also provided, as is the risk after implementation of control measures.

Several additional sub-plans are referred to where more detailed, specific management actions are required. Each of these sub-plans should be referred to as and when required for a complete understanding of the construction management measures required to be implemented to avoid and minimise environmental impacts during construction.



 Table 6.5
 Risk Assessment of Potential Impacts During Construction

Potential Impact	Likelihood	Consequence	Inherent Risk Rating	Residual Risk Rating
Unapproved Clearance				
Clearance of INTG TEC outside the approved clearance area.	Possible	Major	High	Medium
Vehicles and/or machinery driving on INTG TEC outside of approved clearance areas and tracks.	Likely	Moderate	Medium	Low
Weeds, Pests and Grazing				
Introduction of new weeds to the Project Area, or increase in weeds, through use of contaminated construction material, machinery and vehicles, leading to reduction in vegetation condition in adjacent areas.	Likely	Moderate	Medium	Low
Altered grazing regimes (increased grazing, preferential grazing, reduction or loss of grazing, altered grazing times), leading to changes in INTG TEC structure, composition and condition.	Possible	Minor	Low	Low
Soil Erosion, Sedimentation and Altered Hydrology				
Loss of topsoil and subsequent erosion leading to degradation of INTG in adjacent areas outside of approved clearance area.	Possible	Moderate	Medium	Low
Sedimentation of INTG TEC from construction run-off (soil).	Likely	Minor	Low	Low
Altered hydrology (due to altering of drainage lines through excessive runoff), leading to unfavourable changes in INTG structure and composition.	Possible	Moderate	Medium	Low
Dust emissions smothering INTG TEC flora and suppressing photosynthesis, leading to reduction of vegetation condition in adjacent areas.	Likely	Moderate	Medium	Low
Stockpiling of equipment and materials and introduction of rubbish and waste materials causing degradation to the integrity of the grassland, including through harbouring pest animal species such as rabbits.	Likely	Moderate	Medium	Low
Hazardous Materials and Spillages				
Chemical spills (e.g. fuel/diesel) leading to a reduction in vegetation condition.	Possible	Minor	Low	Low
Inappropriate use of herbicides or pesticides for weed management leading to reduction in vegetation condition of INTG.	Possible	Minor	Low	Low



Potential Impact  Rehabilitation Management			Likeliho	od	Consequence	Inhere Rating	ent Risk	Residual Risk Rating
Areas of temporary clearance in INTG fail to regenerate with native INTG associated species.	Likely	Minor		Medium		L	ow	

## Table 6.6 Risk Assessment of Potential Impacts During Operation

Potential Impact	Likelihood	Consequence	Inherent Risk Rating	Residual Risk Rating (After Controls Implemented)
Unapproved Clearance				
Clearance of INTG TEC outside the approved clearance area (including for future installation of infrastructure or maintenance of existing infrastructure).	Possible	Moderate	Medium	Low
Vehicles and/or machinery driving on INTG TEC outside of approved clearance areas and tracks.	Possible	Moderate	Medium	Low
Weeds, Pests and Grazing				
Altered grazing regimes (increased grazing, preferential grazing (e.g. under turbine shade), reduction or loss of grazing, altered grazing times) leading to changes in INTG TEC structure, composition and condition.	Possible	Minor	Low	Low
Introduction of new weeds to the Project Area, or increase in weeds, through foot-traffic, light vehicles and other machinery that may be required during the operational phase.	Possible	Moderate	Medium	Low
Soil Erosion, Sedimentation and Altered Hydrology				
Loss of topsoil and subsequent erosion leading to degradation of INTG in adjacent areas outside of approved clearance area.	Possible	Minor	Low	Low
Sedimentation of INTG TEC from run-off (soil) in cleared areas.	Possible	Minor	Low	Low



Potential Impact	Likelihood	Consequence	Inherent Risk Rating	Residual Risk Rating (After Controls Implemented)
Altered hydrology, due to altering of drainage lines through excessive runoff or concentrating water in new locations (i.e. roadside), leading to unfavourable changes in INTG structure and composition.	Possible	Minor	Low	Low
Dust emissions smothering INTG TEC flora and suppressing photosynthesis, leading to reduction of vegetation condition in adjacent areas.	Possible	Minor	Low	Low
Hazardous Materials and Spillage				
Chemical spills (e.g. fuel/diesel) leading to a reduction in vegetation condition.	Rare	Minor	Low	Low
Inappropriate use of herbicides or pesticides for weed management leading to reduction in vegetation condition of INTG.	Possible	Minor	Low	Low
Rehabilitation Management				
Areas of temporary clearance in INTG fail to regenerate with native INTG associated species.	Likely	Minor	Medium	Low



## 7.0 Management Targets, Performance Indicators and Triggers

A range of management targets associated with corresponding performance indicators and triggers for management actions are detailed in **Table 7.1.** 

 Table 7.1
 Management Targets, Performance Indicators and Triggers

Targets	Performance Indicators	Triggers
Unapproved Clearance		
Construction and operation do not result in clearance of more than 6.14 ha of Class B INTG TEC, 2.44 ha of Class C INTG, and no impact to Class A INTG TEC.	Final disturbance area of INTG TEC, as measured through post construction field audit/survey and / or aerial imagery.	Clearance of Class B INTG TEC outside of the approved Disturbance Footprint.
Onsite assessment of micro siting feasibility undertaken by construction contractor prior to clearance for areas where the Disturbance Footprint intersects with Class B and Class C INTG.	All infrastructure is micro sited to further reduce impact to Class B INTG if possible.  Measurable reduction in the area of INTG being impacted between current design and construction, based on post-clearance auditing of clearance area.	Any impact to retained INTG TEC outside of the approved clearance area and/or the Disturbance Footprint.
No vehicle, machinery or equipment impacts within retained INTG TEC.	No vehicle, machinery or equipment impacts observed within retained INTG TEC.	Vehicle, machinery or equipment impacts observed within retained INTG TEC.
Weeds, Pest and Grazing		
No introduction of new weed species or increase in weed abundance or distribution within retained INTG TEC.	No records of new weed species or increased distribution or abundance of existing weeds observed within retained INTG TEC.	New weed species or an increase in weed distribution or abundance observed within retained INTG TEC.
Construction and operation do not result in a significant alteration to grazing regime.	No significant alteration to the grazing regime due to construction or operation.  No communications from landholders to indicate a change in grazing regime has occurred as a result of the infrastructure.	Significant alteration to grazing regime within Disturbance Footprint (e.g. increased grazing, preferential grazing) as communicated by the landowner(s) / manager(s).



Targets	Performance Indicators	Triggers
Soil Erosion, Sedimentation and Altered Hydrology		
No erosion or sedimentation within retained INTG TEC.	No evidence of erosion or sedimentation observed during routine environmental audits within retained INTG TEC.	Any signs of notable erosion or sediment accumulation as a result of uncontrolled surface water flows within retained INTG TEC.
No excessive dust deposition within retained INTG TEC.	No excessive dust deposition observed within retained INTG TEC during routine environmental audits during construction.	Excessive dust deposition observed within retained INTG TEC.
Hazardous Materials and Spillage		
No rubbish, waste materials or stockpiles within retained INTG TEC.	No rubbish, waste materials or stockpiles observed within retained INTG TEC.	Rubbish, waste materials or stockpiles observed within retained INTG TEC.
No hazardous chemicals or dangerous goods within retained INTG TEC.	No hazardous chemicals or dangerous goods observed within retained INTG TEC.	Hazardous chemicals or dangerous goods observed within retained INTG TEC.
No broadscale herbicide use in INTG TEC (i.e. targeted treatments only and using specific herbicides).	No impact to non-target vegetation (i.e. native vegetation) from use of herbicide.	Impact / dieback of native vegetation after application of herbicide.
Rehabilitation Management		
Regeneration of INTG TEC within designated 'temporary' clearance areas (3.72 ha Class B, and 1.30 Class C).	Regeneration of native species, reminiscent of surrounding unimpacted INTG, with trajectory of improvement observed within temporary Disturbance Footprint.	No regeneration of native species recorded in temporary Disturbance Footprint within three years of rehabilitation commencing.



## 8.0 Response Measures and Corrective Action

If a trigger value occurs (**Table 7.1**), it will be reported as an environmental incident. An investigation will then be conducted to determine the extent and cause of the incident, and to prevent it from occurring again. For example, the proposed management measure for that management target, performance indicator and trigger will be reviewed to ensure it is being effectively implemented, operated and / or maintained. If it is not, it will be repaired and / or improved.

## 8.1 Direct Impact

If clearance occurs outside of the approved Development Envelope, or in excess of the approved Disturbance Footprint, appropriate mitigation strategies must be implemented immediately. It should be noted that the specific approval conditions are not yet known and will be added/updated to the section below once they become available. General approval conditions which must be adhered to include:

- The applicant must ensure that only native vegetation approved for removal in accordance
  with the relevant decisions under the NV Act and EPBC Act decision is removed. Prior to
  clearance commencing, the applicant must advise all persons undertaking the vegetation
  removal or working on site, of all relevant conditions of approval and associated statutory
  requirements.
- If there is any change to the clearance requirements for the development, Neoen is to confirm the final clearance area and SEB offset requirements upon finalising the detailed design of the Project, prior to undertaking any clearance that varies from this decision.
- As such, Neoen must be notified of any clearance outside of the approved Disturbance Footprint and / or Development Envelope so that DCCEEW can be notified.
- A variation to the approval decision(s) will need to be made if impacts are proposed outside
  of the approved Project Area boundary or are in exceedance of the approved impact upon
  native vegetation, MNES or MNES habitat.

## 8.2 Indirect Impact

If an indirect impact trigger occurs (e.g. erosion and/or sedimentation, excessive dust, new weed species or increase in weeds, and others outlined in **Table 7.1**), it must be investigated to determine the extent and cause, and appropriate mitigation measures must be implemented to prevent it from occurring again. Remediation and/or rehabilitation should also be undertaken, provided it does not cause any further adverse impact (such as undesirable soil disturbance).

Indirect impact triggers may result in an adaptive management approach and resulting update or change to the measures outlined in this INTG MP, the CEMP, OEMP or associated sub plans to ensure that the most effective management actions are being implemented. Any material changes to the management plan must be submitted to the Minister for approval prior to the change occurring.



## 9.0 Construction Management Measures

The types of construction management measures are divided into five categories, based on the Standard Hierarchy of Controls, described in **Table 9.1.** For each management measure, the table also identifies the location, timing, frequency and person responsible for ensuring the action is implemented.

The person or position responsible is indicative only, and the position title or responsibility may change depending on the specific EPC contractor. These tables should be updated to reflect the specific EPC Contractor positions and responsibilities.

Management measures relevant to INTG to be implemented during construction are outlined in **Table 9.2**. Please refer to the CEMP (Umwelt, 2025) for further details on broad management measures for GNWF.

Table 9.1 Description of the Types of Construction Management Measures

Туре	Description
Elimination	Physical removal of the hazard. Most elimination measures have been undertaken in the planning and design phase of the project to avoid impacts to environmental aspects.
Substitution	Replace the hazard with something likely to be less hazardous to the environment, such as using low impact methods of construction; use of targeted herbicides for weed control; and planning of stockpile areas to reduce hazard potential.
Engineering	Measures to avoid environmental harm, such as erosion control, dust suppression, and waste management protocols, to isolate the environmental aspect from the hazard.
Administrative	Measures that change the way work is done to reduce environmental harm, such as through training programs for workers on environmental policies, best practices, and the importance of compliance; monitoring, inspection and audits to assess effectiveness of controls; reporting and emergency response procedures; spatial data systems.
Personal Protective Equipment (PPE)	Protect the worker (or environmental aspect) with PPE.



 Table 9.2
 Construction Management Measures for INTG

Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
Pre-construction Micro Siting Surveys					
<ul> <li>When works are proposed to commence in high-risk areas containing INTG TEC, ensure adequate lead in time is available to:</li> <li>undertake pre-construction surveys and micro siting</li> <li>clearly identify and indicate environmental no-go zones around Class B and Class C INTG to be avoided, using spatial data as a minimum. Flagging and survey pegs may be used as a method for clear delineation to mark the extent of the approved Disturbance Footprint where practicable.</li> </ul>	Administrative	Site Office	Pre-construction Four weeks prior to commencing any works within or adjacent to INTG TEC.	As required	Site Supervisor / HSE Manager
Pre-construction Micro siting Surveys: Prior to commencing construction work (such as, but not limited to, clearing and grubbing, and excavation) within Class B and Class C INTG TEC, the head construction contractor will work with specialist advisors (i.e. ecologists) to undertake a micro siting process to micro site (relocate) infrastructure to avoid and/or minimise impacts to Class B and Class C INTG TEC, where possible. A micro siting process is detailed in <b>Section 9.1</b> No construction works will commence until approval has been provided in accordance with the Permit System outlined in <b>Section 2.0</b> and the CEMP.	Administrative	Within Class B and Class C INTG TEC within the Disturbance Footprint	Pre-construction.	As required and ongoing during design	Site Supervisor / Health Safety and Environment (HSE) Manager
<u>Unexpected Find Procedure:</u> If pre-clearance surveys within the Disturbance Footprint detect areas of INTG which have not previously been mapped, a 'Stop Work' procedure should be in place.	Administrative	Disturbance Footprint	Pre-construction / construction	As required	Site Supervisor / HSE Manager



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
General Management Measures					
Inductions: All staff and contractors will complete a detailed, site-specific induction which provides an overview of INTG TEC, its legislative significance and potential impacts to INTG TEC as well as management measures associated with protection of INTG TEC.	Administrative	Site office (or anywhere else suitable)	Prior to commencing any work on site.	Once	Site Supervisor / HSE Manager
<u>Fact Sheets</u> : Display a fact sheet on INTG TEC (include images of INTG TEC and mapping showing the location of Class B and Class C INTG TEC within the Project Area) at all Site Offices.	Administrative	On site notice boards and in lunchrooms	During construction.	Ongoing	Site Supervisor / HSE Manager
Toolbox Meetings: Hold toolbox meetings to assist in identification and highlight the importance of INTG TEC. During the meetings, highlight INTG TEC included in the Disturbance Footprint; as well as INTG TEC outside of the Disturbance Footprint, including Class B and Class C and ensure that all staff and contractors are aware of the control measures to avoid, minimise and mitigate impacts to INTG TEC.	Administrative	Site Office (or anywhere else suitable)	Prior to commencing any works within or adjacent to INTG TEC.	As required	Site Supervisor / HSE Manager
Clearance Delineation and INTG Protection Measures					
Mapping and Spatial Data: Provide clear maps and spatial data indicating Disturbance Footprints, approved tracks, turnaround areas, car parks, equipment laydown areas and materials storage areas, as well as exclusion zones to ensure that no unapproved disturbances occur which may affect INTG TEC.	Engineering	Provide to those involved in earthworks	Prior to commencing any work on site.	Ongoing	Site Supervisor / HSE Manager
Signage and Exclusion Zones: Clearly identify and indicate exclusion zones around areas of Class B INTG which adjoin the Disturbance Footprint using spatial data as a minimum (noting that ALL native vegetation is protected and must be avoided outside of the approved clearance areas). Spatial data will be	Engineering	Around the outside of all INTG TEC	Prior to commencing any works in, or within 200 m of INTG TEC.	Ongoing	Site Supervisor / HSE Manager



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
used for clear delineation as a minimum, as well as signage and barriers/bunting where practicable.					
Clearly Delineate Boundary of Disturbance Footprint: Prior to commencing large scale clearing, the outer extents of the approved disturbance footprint will be clearly identified and indicated through spatial mapping. Often this will occur through sending the grader through first using GPS control with preloaded spatial data, to make a mark at outer extents, or in some instances signage or bunting may be used.	Engineering	On the edge of the Disturbance Footprint within INTG TEC.	As soon as possible during construction works.	Ongoing	Site Supervisor
Approved Clearances: Clearly delineate on site INTG TEC that is included in the approved Disturbance Footprint. As a minimum, this is to be done using spatial data management system and process in place to clearly and promptly communicate and implement design changes to ensure that all works are in accordance with the latest design (i.e. to ensure micro siting or other changes are communicated in a clear and timely manner).	Engineering	Disturbance Footprint	Prior to clearing any INTG TEC.	Ongoing	Site Supervisor / HSE Manager
Weeds, Pest and Grazing Management					
Pre-construction Weed Surveys: Undertake a weed survey within the Development Envelope to understand existing weed conditions and potential impacts (e.g. spread) during construction which may impact INTG TEC. Focus on mapping of Declared weeds.	Administrative	Development Envelope and Development Footprint	Prior to commencing any construction works.	Ongoing	Neoen
Ongoing Weed Monitoring and Control: Undertake periodic weed monitoring and control, to mitigate potential impacts (e.g. spread) during construction (and operation) which may impact INTG areas. Ensure all monitoring activities are recorded, including extent, date and findings.	Administrative	Within INTG TEC and throughout Disturbance Footprint	Regular weed monitoring at a minimum of twice per year, once in early winter and again in early spring to capture	Ongoing	Site Supervisor / HSE Manager



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
			problem weeds as they emerge before setting seed.		
Weed Control: Ensure that any weed control uses a method which is in accordance with minimum disturbance techniques and does not have a significant adverse impact on INTG TEC. This will include hand pulling of weeds and/ or spot spraying of individual weeds with targeted recommended herbicide and use of spray hood to prevent off target application. Any accidental spray onto native plants should be rectified by promptly removing sprayed leaves / branches if practicable.	Engineering	Within INTG TEC and throughout Disturbance Footprint	During construction.	Ongoing	Site Supervisor / HSE Manager
Vehicle and Equipment Hygiene: No vehicles will be required to work off existing formed roads during the operation of the wind farm (noting, there may be some instances where machinery may need to go off road for some works e.g. if a cable fault occurs, machinery will need to attend the area to excavate the cable and repair it. Temporary disturbance will be minimised wherever possible, and contractors would avoid INTG restored areas wherever possible). Ensure all vehicles and maintenance equipment are clean and free of soil material, including materials containing weed seed or propagules, prior to arriving on site, and prior working near INTG grasslands.  If vegetative material or earth is present, ensure that the equipment is washed down at an appropriate offset facility to prevent vegetative material or earth potentially containing weed seeds being brough into the site and into areas of INTG TEC.	Engineering	Site entrance and INTG TEC boundary	Prior to arriving on site and prior to commencing works within, or near, INTG TEC.	As required	Site Supervisor / All site personnel
Wash-down Bays: Ensure that designated wash-down bays to clean vehicles and construction equipment during construction works are appropriately contained with a capture dam to withhold dirt and organic matter, with only water	Engineering	Site Compound.	Prior to commencing and during	Ongoing	Site Supervisor



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
filtered through a sediment fence or similar, eventually being released to the environment. Water release points will be designed in a way to avoid water runoff impacts to INTG habitat. Frequent targeted weed monitoring (and control) will occur in the capture dams and at water release points to prevent weed establishment.			construction works.		
Soil Stockpiles: Where possible, ensure dedicated soil stockpile storage areas, such as in laydown areas, are located at a minimum distance of 200 m from any area mapped as INTG TEC Appendix 2.  If this minimum separation distance between dedicated stockpile areas, is not able to be achieved, separation distances to be maximized as much as possible and additional measures imposed including:  • prompt redistribution of topsoil following construction,  • appropriate dust suppression through watering, covering or application of soil binders.  Where stockpiles in dedicated stockpile zones are required to remain for over seven days, regular monitoring to ensure dust suppression is effective will need to occur, including monitoring for weeds.  If soil or fill material stockpiles become infested with weeds, ensure weed control is undertaken in accordance with minimum disturbance techniques (as above) and weed control work does not have a significant adverse impact on INTG TEC. Prioritise stockpile monitoring and weed management specific to INTG soil, and use hand-pulling techniques where possible, to minimise potential damage to soil seedbank, required for rehabilitation activities.  Exclusion zones to be available in digital format to all contractors during construction.	Engineering	Disturbance Footprint	As soon as practicable and at least 10 – 14 days prior to moving material.	As required	Site Supervisor / HSE Manager



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
Livestock Grazing Regimes: If a significant alteration of grazing regime (for example increased grazing or preferential grazing in particular areas) is observed and considered to be potentially impacting INTG, then it will need to be investigated by a suitably qualified ecologist and mitigation measures, or additional monitoring implemented where and if possible.  Landholder to advise Neoen if any substantial changes to the usual grazing regime and / or placement of watering points is required because of the construction of GNWF. Proposed alternative locations should be reviewed by a suitably qualified ecologist to ensure no adverse impacts to INTG could be reasonably expected due to the proposed change.  To ensure GNWF prevents, or minimises its impact on existing livestock grazing regimes, project infrastructure, such as hard stands and access tracks, shall not be used to install new watering points for placement of livestock feeders.	Administrative	Project Area	Prior to, and during construction (and operation).	Ongoing, as required	HSE Manager /Neoen Liaison / Ecological Contractor
Rehabilitation: In areas of disturbed INTG (any class) or in areas within 200 m of an INTG patch, re-establishing cleared topsoil will be prioritised, with redistribution and scarification throughout exposed areas to have occurred within two years after ground disturbance to enable natural regeneration to commence. Rehabilitation management, including monitoring detailed in Section 9.2 and Section 11.0.	Engineering	Disturbance Footprint. Within 200 m of INTG TEC patch	As soon as practicable.	Ongoing	Site Supervisor
Erosion and Sediment Controls: Ensure all erosion and sediment controls are checked for effective operation and maintained, repaired or improved, particularly in areas mapped as INTG TEC.	Administrative	Disturbance Footprint.	During construction.	Regularly (weekly as a minimum), particularly prior to any significant rainfall event or in	Asset Manager (Neoen) HSE Manager



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
				response to an observed trigger.	
<u>Dust Deposition:</u> Monitor for visual signs of dust deposition on INTG TEC within 50 m of Disturbance Footprint.	Administrative	INTG within 50 m of Disturbance Footprint	Regular (weekly inspections).	Ongoing	HSE Manager
Soil Stockpiling: Where possible, ensure dedicated soil stockpile storage areas, such as in laydown areas, are located a minimum distance of 200 m from any area mapped as INTG TEC Appendix 2.  If this minimum separation distance between dedicated stockpile areas cannot be achieved, separation distances to be maximized as much as possible and additional measures imposed include:  prompt redistribution of topsoil following construction, appropriate dust suppression through watering, covering		District			Cita Conservation
or application of soil binders.  Where stockpiles in dedicated stockpile zones are required to remain for over seven days, regular monitoring to ensure dust suppression is effective will need to occur, including monitoring for weeds.  For incidental stockpiles used during earthworks and cut and fill balancing across the site that occur within 200 m of INTG TEC, will be subject to increased frequency of dust suppression measures through water application, during	Engineering	Disturbance Footprint	Construction	Ongoing	Site Supervisor, HSE Manager
earthworks  Exclusion zones to be available in digital format to all contractors during construction.					
<u>Traffic Speed Limits:</u> A maximum speed limit of 40 km/hr enforced on all access tracks. For access roads within 200 m of INTG TEC, additional dust suppression measures will be imposed through either application of material binders along	Administrative	Project Area	During construction.	Ongoing	Site Supervisor



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
roads in these sections, or speed limits of 25 km/hr enforced using signposts, with monitoring for compliance.					
Disturbance of Soil and Vegetation: Minimise disturbance of soil and vegetation during all activities undertaken throughout the construction phase (including vehicle access, general infrastructure, and site maintenance, weed control, fire management, grazing and fauna surveys) within the Project Area, particularly within areas mapped as INTG TEC, by:  Only driving on designated vehicle access tracks.  Minimising driving (walk where possible).  Ensuring that all designated vehicle access tracks and site stormwater drainage is well maintained to prevent erosion and sedimentation from occurring.  Minimising digging and soil disturbance to only that which is required to implement the approved action, including ripping of rabbit warrens to control rabbits.	Engineering	Disturbance Footprint.	During construction	During all activities.	Site Manager
Hazardous Materials and Dangerous Goods Management					
Hazardous materials and dangerous goods containers and storage areas, including refueling areas will be stored and managed in accordance with applicable Australian Standards, Safety Data Sheets and site-specific Safe Work Method Statements.	Engineering	Disturbance Footprint and Development Envelope	Ongoing	Ongoing	Site Supervisor / HSE Manager
Best practice and low impact use of herbicides (as outlines in Weed, Pest and Grazing Management section).	Engineering	Disturbance Footprint, Development Envelope	Ongoing	As required	HSE Manager
General - Other					
Soil Stockpiles: Topsoil removed from temporary clearance areas within mapped INTG will be stockpiled separately to other soil stockpiles and clearly marked so that it can be	Engineering	Disturbance Footprint	Ongoing	As required	Site Supervisor / HSE Manager



Construction Management Measures	Туре	Location	Timing	Frequency	Responsibility
redistributed in the corresponding INTG location at commencement of construction.					
Weed Management: If soil or fill material stockpiles become infested with weeds, ensure weed control is undertaken in accordance with minimum disturbance techniques and weed control work does not have a significant adverse impact on INTG TEC. Prioritise stockpile monitoring and weed management specific to INTG soil, and use hand-pulling techniques where possible, to minimise potential damage to soil seedbank, required for rehabilitation activities.	Engineering	Soil stockpiles	Ongoing during construction	As required	Site Supervisor / HSE Manager
Monitoring: Conduct regular onsite monitoring of INTG vegetation communities to detect any unforeseen impacts resulting from construction or related activities.  Additional targeted surveys and mitigation measures will be required if monitoring identifies signs of damage, decline, or other adverse effects on INTG TEC areas.	Administrative	Within INTG TEC and Disturbance Footprint	During construction.	Ongoing, at least monthly	Site Supervisor / HSE Manager
Undertake ongoing monitoring in Class B INTG TEC areas undergoing rehabilitation following temporary construction impacts to measure successful recovery and identify any need for adaptive management.  Document all monitoring results and adjust management strategies accordingly to protect the integrity of INTG vegetation communities throughout the Project lifecycle.	Administrative	Within Class B INTG TEC and throughout Disturbance Footprint	During construction.	Ongoing	Site Supervisor / HSE Manager



## 9.1 Micro Siting

Infrastructure will be micro sited (shifted and/or adjusted slightly) prior to construction works to further minimise/reduce impacts to MNES such as (but not limited to) INTG and INTGs and their habitat, where possible. The purpose of micro siting infrastructure will be:

- To reduce potential impacts to MNES from the levels previously identified (i.e. the impact levels detailed in the EPBC referral documentation).
- To avoid other project constraints, such as buried artefacts or remains which may not be discovered until civil works begin.
- In case of unacceptable geotechnical conditions in a given position, such as an underground cavity.

Notwithstanding any of the above, Neoen commits that micro siting will not increase impacts to MNES.

## 9.1.1 Proposed Approach

The majority of micro siting has already been achieved through the design development process to date, and the design layout and disturbance footprint submitted as part of the EPBC referral reflects a largely complete design layout and infrastructure footprint. However, Neoen wishes to apply an adapting approach to further minimise impacts to MNES such as (but not limited to) INTG TEC and INTG's and their habitat, and therefore infrastructure may be micro sited (shifted and / or adjusted slightly). The approach will be undertaken in the order of avoid, minimise and then mitigate as follows.

#### Pre-clearance survey:

- Conduct a pre-clearance survey on site shortly before construction begins, with focus on areas where the Disturbance Footprint overlaps with the known location of INTG TEC.
- If an access track is located on the edge of INTG TEC, investigate the potential to shift or narrow the track slightly.
- If another infrastructure component is found to encroach on INTG TEC, such as hardstand or met
  mast, consider viability to relocate to less sensitive location nearby, or reduce / adjust proposed
  design to avoid or further minimise impact on INTG.
- If INTG not previously mapped is detected within the Disturbance Footprint, a Stop Work procedure will be in place. The area will be assessed for extent and likely impact and escalated to relevant manager. A review process may need to be undertaken, including ecological survey, with potential for variation to approvals.
- If information comes to light that indicates a reasonable opportunity to avoid said impacts, a micro siting assessment will be undertaken.

#### Micro siting assessment:

- Consult with construction engineer to determine if the infrastructure can be micro sited based on information gathered during the pre-clearance survey.
- Aim to avoid impacts if there is a reasonable opportunity to do so.



- Undertake additional pre-clearance surveys in areas determined as suitable for micro siting if not previously assessed.
- Pre-clearance surveys will also assess for presence of any other potential constraints such as EPBC listed threatened plant species, Pygmy Blue-tongue Lizards and cultural heritage, not currently known to occur in those locations.
- Select feasible option with least impact on MNES.

## 9.2 Rehabilitation of Temporary Clearance

A Project specific Rehabilitation Management Plan will be made for the Project which identifies and addresses relevant issues for rehabilitation of temporary impacts following construction.

Rehabilitation of temporarily disturbed areas will include topsoil redistribution and weed control. Topsoil redistribution will occur as soon as reasonably practicable and no longer than two years following construction activities being completed in the area.

Rehabilitation for temporary clearance areas in INTG will incorporate additional measures to address the high priority and sensitivity of this vegetation association. Goals, targets, triggers and management actions for INTG rehabilitation are described in **Table 9.3**.

Success of rehabilitation is not a compliance condition associated with approvals, as all temporary impacts are fully accounted and offset in approved Native Vegetation Clearance Approval and EPBC Act Approvals. Monitoring is discussed in **Section 11.1.** 

Table 9.3 INTG Rehabilitation Goals, Targets, Triggers and Management Actions

	Description
Goal	To restore INTG in areas of temporary clearance through natural regeneration, following spreading of topsoil derived from the original site.
Target	In Class B and Class C INTG, return the area to its original condition, prior to construction, within 10 years of temporary impact ceasing.
Triggers	No natural regeneration of Lomandra tussocks observed during monitoring in disturbed temporary clearance within 5 years of rehabilitation commencing.
	Perennial native grass tussock density does not equate to more than or equal to one per square metre after five (5) years in Condition Class B INTG.
	Declared weeds detected in rehabilitation areas.
	Disturbance resistant species or other broad-leafed herbs identified in the National Recovery Plan for INTG (Turner, 2012) are not detected on site within 5 years of rehabilitation commencing.
	Grazing impacts (from native or introduced herbivores) identified as cause for low or unsuccessful establishment of native species, through grass tussock measurements.
	Any one of excessive sedimentation, erosion or dust deposition from ongoing use of adjacent road or infrastructure component identified in rehabilitation area.
Adaptive	Investigate suitability for livestock fencing in areas of rehabilitating INTG.
Management	Investigate suitability for grazing management in areas of rehabilitating INTG.
	<ul> <li>Investigate opportunities for revegetation works through planting of tube stock (native grasses, Lomandra and diversity plantings of herbaceous species).</li> </ul>



	Description
Corrective Management	Treatment (as deemed suitable) to areas identified as containing Declared weeds, or other weeds of environmental or site significance.
	Treatment of any identified areas of erosion, sedimentation or dust deposition as per corrective actions identified in a site-specific Sedimentation, Erosion and Dust Management Plan, or as otherwise deemed suitable.

Rehabilitation will also be addressed in the future in a decommissioning management plan at the end of the Projects lifecycle. Neoen (or the operator at the time or decommissioning) will be responsible for all temporary impact, decommissioning and rehabilitation activities and expenses, including preparation of a Decommissioning Rehabilitation Management Plan using best practice methods at the time the operation ceases.



## **10.0 Operational Management Measures**

Management measures to be implemented for the operational lifespan of the Project relevant to INTG are outlined in **Table 10.1.** 

Broad operational management measures applicable to GNWF will be detailed in an Operational Environmental Management Plan (OEMP), which is yet to be prepared. This plan must be developed and approved prior to the commencement of wind farm operations.



 Table 10.1
 Operational Management Measures

Operational Management Measures	Туре	Location	Timing	Frequency	Responsibility
General Management Measures					
Inductions: All staff and contractors will complete a detailed, site-specific induction which provides an overview of INTG TEC and potential impacts to INTG TEC as well as management measures associated with the protection of INTG TEC.	Administrative	Site office (or anywhere else suitable)	Prior to staff commencing any work on site.	Once	Site Supervisor / HSE Manager
Fact Sheets: Display a fact sheet on INTG TEC (including images of INTG TEC and mapping showing the location of Class B and Class C INTG TEC within the Project Area) at all Operation and Maintenance Facilities.	Administrative	On site notice boards and in lunchrooms	During operation.	Ongoing	Site Supervisor / HSE Manager
Clearance Delineation and INTG Protection Measures					
Mapping and Spatial Data: Provide clear maps and spatial data indicating approved tracks, turnaround areas, car parks, equipment laydown areas and materials storage areas, as well as exclusion zones to ensure that no unapproved disturbances occur as a result of wind farm operational, and maintenance works which may affect INTG TEC.	Engineering	Provide to those involved in operational and maintenance works.	At the end of construction	Ongoing	Construction Site Supervisor / HSE Manager
Identification and indication of Exclusion Zones: Identify and indicate exclusion zones around areas of Class B INTG which adjoin the final infrastructure footprint (noting that ALL native vegetation is protected and must be avoided outside of the operational areas).	Engineering	Where Class B INTG TEC adjoins wind farm infrastructure	At the end of construction	Ongoing	Supervisor / HSE Manager



Operational Management Measures	Туре	Location	Timing	Frequency	Responsibility
Weeds, Pest and Grazing Management					
Ongoing Weed Monitoring: Undertake periodic weed monitoring and control to mitigate potential impacts (e.g. spread) during wind farm operation which may impact INTG areas. Ensure all monitoring and control activities are recorded, including extent, date and findings.  Ensure that any weed control uses a method which is in accordance with minimum disturbance techniques and does not have a significant adverse impact on INTG TEC.	Administrative	Within INTG TEC and throughout Project Area	During operations.	Ongoing	Site Supervisor / HSE Manager
Vehicle and Equipment Hygiene: No vehicles will be required to work off existing formed roads during operation of the wind farm. Ensure all vehicles and maintenance equipment are clean and free of soil material, including materials containing weed seed or propagules, prior to arriving on site, and prior working in close proximity to INTG grasslands. If vegetative material or earth is present, ensure that the equipment is washed down at an appropriate offsite facility to prevent vegetative material or earth potentially containing weed seeds being brought into the site and into areas of INTG TEC.	Engineering	Site entrance and INTG TEC site boundary	Prior to arriving on site and prior to commencing works within, or in close proximity to, INTG TEC.	As required	Site Supervisor / All site personnel
Livestock Grazing Regimes: If a significant alteration of grazing regime (for example increased grazing or preferential grazing in particular areas) is observed and considered to be potentially impacting INTG, then it will need to be investigated by a suitably qualified ecologist and mitigation measures, or	Administrative	Project Area	During operation.	Ongoing, as required	HSE Manager /Neoen Liaison / Ecological Contractor



Operational Management Measures	Туре	Location	Timing	Frequency	Responsibility
additional monitoring implemented where and if possible.  Landholder to advise Neoen if any substantial changes to the usual grazing regime and / or placement of watering points is required because of the construction of GNWF. Proposed alternative locations should be reviewed by a suitably qualified ecologist to ensure no adverse impacts to INTG could be reasonably expected due to the proposed change.  To ensure GNWF prevents, or minimises its impact on existing livestock grazing regimes, project infrastructure, such as hard stands and access tracks, shall not be used to install new watering points for placement of livestock feeders.					
Soil Erosion, Dust Management and Drainage Management					
<u>Dust Deposition:</u> Monitor for visual signs of dust deposition on INTG TEC within 50 m of Disturbance Footprint, during regular site auditing.	Administrative	INTG within 50 m of Infrastructure	Regular (quarterly inspections).	Ongoing	HSE Manager
Traffic Speed Limits: A maximum speed limit of 40 km/hr enforced on all access tracks. For access roads within 200 m of INTG TEC, additional dust suppression measures will be imposed through either application of material binders along roads in these sections, or speed limits of 25 km/hr enforced using signposts, with monitoring for compliance.	Administrative	Project Area	During operation.	Ongoing	Site Supervisor
<u>Disturbance or Soil and Vegetation:</u> Minimise disturbance of soil and vegetation during all activities undertaken throughout operations (including vehicle access, general infrastructure,	Engineering	Disturbance Footprint.	During operation.	During all activities.	Asset Manager (Neoen)



Operational Management Measures	Туре	Location	Timing	Frequency	Responsibility
and site maintenance, weed control, fire management, grazing and fauna surveys) within the Project Area, particularly within areas mapped as INTG TEC, by:					
<ul> <li>only driving on designated vehicle access tracks;</li> </ul>					
<ul> <li>minimising driving (walk where possible);</li> </ul>					
<ul> <li>ensuring that all designated vehicle access tracks and site stormwater drainage is well maintained to prevent erosion and sedimentation from occurring; and</li> </ul>					
<ul> <li>minimising digging and soil disturbance to only that which is required to implement the approved action, including ripping of rabbit warrens to control rabbits.</li> </ul>					
Hazardous Materials and Dangerous Goods Management					
Hazardous materials and dangerous goods containers and storage areas will be stored and managed in accordance with applicable Australian Standards, Safety Data Sheets and site-specific Safe Work Method Statements.	Engineering	Project Area	During Operation.	Once	Site Supervisor / HSE Manager
Rehabilitation Management (see Section 11.0)					
Soil Stockpiles: INTG specific topsoil to be redistributed on areas of temporary clearance in associated patch of INTG, to initiate rehabilitation.	Engineering	Disturbance Footprint	As soon as practicable Once construction works have ceased in the area	As required	Site Supervisor / HSE Manager



Operational Management Measures	Туре	Location	Timing	Frequency	Responsibility
Weed Management: If soil or fill material stockpiles or temporary clearance areas become infested with weeds, ensure weed control is undertaken in accordance with minimum disturbance techniques and weed control work does not have a significant adverse impact on INTG TEC. Prioritise stockpile monitoring and weed management specific to INTG soil, and use hand-pulling techniques where possible to minimise potential damage to soil seedbank, required for rehabilitation activities.	Engineering	Soil stockpiles, temporary clearance areas.	Ongoing during construction	As required	Site Supervisor / HSE Manager
Maintain ongoing monitoring in areas undergoing rehabilitation following temporary construction impacts to ensure successful recovery and identify any need for adaptive management. Document all monitoring results and adjust management strategies accordingly to protect the integrity of INTG vegetation communities throughout the Project lifecycle.	Administrative	Within INTG TEC and Disturbance Footprint	During operation	Ongoing	Site Supervisor / HSE Manager



# 11.0 Monitoring

Due to the short timeframes of construction at any one location, and the application of the mitigation measures outlined in this Plan, construction of GNWF is not expected to have impacts to the condition of INTG which would be detectable on long-term condition monitoring surveys. Regular environmental auditing by the HSE Manager (or other relevant personnel) will audit and regularly report on the performance indicators in **Section 7.0**, and identify triggers for adaptive management, such is in instances of erosion, sedimentation or dust deposition. Triggers will result in corrective action, guided by advice from ecological consultants. Regular auditing methods to detect triggers for management across the construction site are indicated in the CEMP and will be incorporated into an OEMP for the operational phase of the wind farm.

Additional monitoring as part of this INTG TEC MP, will be targeted to monitoring progress at rehabilitation sites, in areas of temporary clearance. An effective monitoring program will be implemented by the Project Owner (Neoen), or their designated proxy, and conducted by an independent, suitably qualified and experienced ecological consultancy. The purpose of this program is to monitor sites of temporary clearance within INTG to determine if rehabilitation measures are effective and to identify triggers to implement corrective adaptive management.

Temporary clearance accounts for 5.02 ha (Class B and Class C INTG) across the WF and OTL. Data will be collected across sites designated within each patch of temporary clearance occurring within INTG. Following each monitoring event, results will be analysed to evaluate the effectiveness of management actions within the INTG area and to identify any management deficiencies or opportunities for improvement.

The data collected during monitoring events will assist in making adaptive management decisions to ensure that INTG TEC condition within the GNWF Project Area is maintained and monitored for triggers at rehabilitation sites in areas of temporary clearance in INTG. Whilst there will be natural variation in INTG TEC condition (i.e. due to climatic factors), the aim is to rehabilitate temporary disturbance areas to a condition representative of pre-clearance condition. If a rehabilitation trigger is observed, then management actions will be reviewed to determine potential causes and solutions. Management actions, where required, will then be altered and updated in the INTG TEC monitoring program.

The Project Owner (Neoen) will work with the suitably qualified and experienced ecological consultancy during to adapt INTG TEC management actions if required.

#### 11.1.1 Site Selection

Monitoring sites will be established across the Project Area, in areas of temporary clearance in Condition Class B and Condition Class C INTG, resulting in two sites on the OTL corridor, and four sites at the WF. Baseline surveys will include a paired adjacent survey site, established approximately 30 m to 50 m from any infrastructure, to be surveyed following disturbance in year 1, year 5 and year 10 to determine the initial condition of the site and its trajectory over time, based on the land management taking place at the site or environmental conditions.



Different survey methodologies will be employed for the rehabilitation and paired sites, due to the nature of the temporary clearance areas being predominantly narrow and linear in nature, and therefore unsuitable for the Condition Class Assessment methods outlined in the National Recovery Plan for INTG. Broadly, monitoring methods for the rehabilitation sites will include a standard photo point, annual traverse of the rehabilitated area to map any Declared weeds, erosion, sedimentation or other management concerns, and a 100 m transect to record perennial native grass tussock and Lomandra frequency per linear metre, reporting grazing, regeneration and species diversity.

The paired survey sites will include a standard photo monitoring point and utilise standard methods outlined in the National Recovery Plan for INTG.

## 11.2 Rehabilitation Monitoring

The objective is to rehabilitate the temporary impact areas within INTG grasslands to reinstate their ecological condition to the same or like condition prior to clearance. This will be assessed through collection of data on the following ecological indicators of vegetation, based on the triggers presented in **Table 9.3.** 

- Perennial native grass tussock frequency per linear metre.
- Basal width of perennial native grass tussocks (including Lomandra).
- Perennial tussock leaf height.
- Evidence of regeneration of Lomandra spp. tussocks.
- Presence of native herbaceous species.
- Presence of Declared weeds.
- Presence of erosion, sedimentation or excessive dust deposition.

**Table 11.1** summarises these indicators and purpose of collecting these ecological indicator data as well as desired or undesirable trends observed.

Methods, summarised below, will include:

- photo point
- 50 m transect
- site traverse.

Methods may need to be modified depending on suitability and site layout, or further information obtained as result of ongoing consultation with relevant experts such as the Northern and Yorke Landscape Board. These methods will be assessed further at the time of monitoring commencement.



Table 11.1 Rehabilitation Site Ecological Health Indicators, Purpose, Desired and Undesirable Trends

Indicator	Purpose	Desired Trend	Undesirable Trend
Perennial native grass tussock frequency per linear metre	Determine the number of perennial native grass tussocks per linear metre.	Increasing in first 5 years, and then stable or slight increase thereafter.	Stable or decreasing.
Regeneration of Lomandra spp. tussocks	Determine if indicator plant species characteristic of the community is naturally regenerating after disturbance.	Regeneration observed.	No regeneration observed.
Basal width of perennial native grass tussocks (including Lomandra)	Determine if the size of perennial native grass tussocks (including Lomandra) is increasing over time, indicating regeneration and maturity.	Increasing in first 5 years, and then stable or slight increase thereafter.	Stable, uniform or decreasing.
Perennial tussock leaf height	Aims to detect changes in height – useful for determining grazing pressure.	Stable or increasing height.	Decreasing.
Presence of native herbaceous species	Determine if INTG associated herbaceous species are regenerating in disturbed areas.	Present, increasing.	Absent, decreasing.
Presence of Declared weeds	Determine if Declared weed are becoming established in disturbed areas.	Absent, or decreasing.	Present or increasing.
Presence of erosion, sedimentation or excessive dust deposition	Determine if the ongoing activities at the wind farm are impacting the rehabilitation areas, and to identify if additional isolated or widespread management measures are applicable.	Absent.	Present.



#### 11.2.1 Photo Point

A photo point will be established at each site preferably facing south and aligned along predetermined transect lines which are within the area of temporary clearance. During each monitoring event, photographs will be taken at these points (marked with star droppers or photo point disks) to provide a visual record for comparison over time.

#### 11.2.2 Transect

In linear areas of temporary clearance (i.e. along access roads), a 50 m transect will be established, marked permanently by the placement of three steel droppers at 0 m, 25 m, 50 m. Where temporary clearance areas do not meet these dimensions, alternative transect dimensions will be identified, suitable for the site. Surveyors will lay out a 50 m tape adjoining each of the droppers to ensure a consistent placement during each survey period.

Surveyors will walk along the transect recording:

- Perennial native grass tussock frequency of intercept with transect line (including Lomandra spp.).
   For each tussock data collected will include:
  - o species
  - o basal width
  - o leaf height
  - o distance along transect.
- Evidence of regeneration of *Lomandra* spp. tussocks, presence or absence.
- Presence of native herbaceous species, including species list.
- Presence of non-native species, including species list.

#### 11.2.3 Site Traverse

All areas of rehabilitation in INTG will be traversed slowly either by vehicle, along existing roads which intersect Lomandra grassland, or on foot to record more general observations of site condition including:

- presence of Declared weeds
- presence of erosion, sedimentation or excessive dust deposition
- evidence of altered land use (i.e. new feed lots or watering points)
- opportunistic observations, for example, of native grazers (kangaroos) or their scats, along with feral animals such as foxes or rabbits (including their tracks, scats, and warrens), or of significant weed outbreaks or infestations.

Where applicable, data collection will include a GPS location, brief description of the observation type, and photograph.



## 11.3 Paired Monitoring Site

#### 11.3.1 EPBC Condition Assessment

A Condition Class Assessment will be undertaken at a paired site, located 30 m to 50 m from rehabilitation sites to track the general condition of INTG within the Project Area over time. The site will be surveyed during spring (ideally October) in year 1, 5 and 10, (commencing from the time of rehabilitation monitoring) with the aim to determine the Condition Class of INTG within the same patch over time, which may be impacted by a range of external factors such as climate or agricultural activity which are outside of the potential impacts as a result of the Project.

The Condition Class Assessment site will be permanently marked with two steel droppers, demarcating a 50 m transect. If steel droppers are unable to be installed (i.e. due to landholder preferences) transects will be GPS marked. One end of the transect will be designated as a photo point, preferably facing in a southerly direction, to visually track condition over time.

The site will include a 50 m transect and search area 25 m either side, comprising a total survey site area of 0.25 ha, in which the Condition Class Assessment will take place. The assessment will include:

- Perennial grass tussock counts along the 50 m transect.
- Estimate of Lomandra tussock density (percent cover) within the 0.25 ha site.
- Ramble survey to record and monitor the status of the INTG TEC condition class parameters as indicated in **Table 11.2**.

Table 11.2 Condition Classes for INTG TEC (DEWR 2007)

Condition Class	Minimum Size	Diversity of Native Plant Species <sup>1</sup>	No. of Broad-leaved Herbaceous Species <sup>1</sup> in Addition to Identified Disturbance Resistant Species <sup>2</sup>	No. of Native Perennial Grass Species <sup>1</sup>	Tussock Count <sup>3</sup>	
Listed Ecological Community (protected by the EPBC Act)						
A	≥ 0.1	> 30	≥ 10	≥ 5	≥ 1/m	
В	≥ 0.25	> 15	≥3	≥ 4	≥ 1/m	
Degraded Patches Amenable to Rehabilitation (not protected by the EPBC Act)						
С		> 5	No minimum	≥1	No minimum	

<sup>1.</sup> As measured in a 50 m x 50 m quadrat (or equivalent).

<sup>2.</sup> The following species are identified as disturbance resistant species: *Ptilotus spathulatus forma spathulatus; Sida corrugata; Oxalis perennans; Convolvulus angustissimus; Euphorbia drummondii; and Maireana enchylaenoides.* 

<sup>3.</sup> As measured along a 50 m transect.



### 11.4 Frequency and Timing of Monitoring

Monitoring events for both rehabilitation sites and paired condition monitoring sites are proposed to be commenced at the completion of construction, following respreading of topsoil in areas of temporary disturbance. The timing of commencement of monitoring may need to be adjusted to account for variable timing of rehabilitation across the site.

Rehabilitation sites will be monitored annually, for a minimum period of 10 years by an independent, suitably qualified ecological consultant, after which the need for ongoing monitoring will be reviewed and discussed with the Department. If successful rehabilitation has been demonstrated prior to this, the 10-year monitoring commitment may be reviewed. Monitoring will be in addition to regular standard auditing undertaken by site environmental manager. If triggers are identified during monitoring, corrective action or adaptive management actions will be assessed and implemented as required.

Paired condition monitoring sites will be surveyed at year 1, 5 and 10 to identify any trends in the condition of the patch of grassland over the period of monitoring, which are outside of potential impacts from the Project.

Field work for monitoring events will be undertaken in spring (i.e., September/ October/ November), with the results of each monitoring event analysed post field survey and used to assess the effectiveness of management actions to identify any management failures or areas for improvement in a timely manner.

### 11.5 Reporting

The Project Owner will submit INTG Rehabilitation Monitoring Reports, which detail the results of the monitoring program and any minor amendments to management actions, such as weed control effort, to the Department, on an annual basis, for the first ten years (as a minimum) of wind farm construction and operations.

The INTG Rehabilitation Monitoring Report will:

- Detail the monitoring methodology.
- Present and analyse the monitoring results.
- Compare the monitoring results to previous monitoring results collected to date.
- Identify any trends in the INTG condition at paired sites in year 1, 5 and 10.
- Recommend any minor amendments to management actions, such as weed control effort, for the Project Owner to consider and if appropriate, implement.
- Document any minor amendments to monitoring methods or management actions that are to be implemented (after consideration and approval by the Project Owner).

Monitoring data will be prepared in accordance with the Guidelines for biological survey and mapped data (Commonwealth of Australia, 2018) and provided to the Department on an annual basis.

Monitoring may also be supplied to the State authority Department of Environment and Water, Native Vegetation Council in support of actions presented for mitigation to native vegetation clearance.



## 11.6 Adaptive Management/ Corrective Actions

An adaptive management approach will be adopted to ensure the objectives of the INTG TEC Management Plan, CEMP and OEMP are being achieved. This involves adapting management actions in response to the results of the monitoring program and to unforeseen or unplanned management threats and issues, as well as to reflect advances in ecological research and land management technologies that may arise during implementation of the Plan.

A suitably qualified and experienced ecological consultancy will review the results of the monitoring program and, if required, recommend changes to relevant management actions. Where appropriate, the Project Owner will implement minor amendments to management actions, such as increasing weed control effort, upon advice from the ecological consultancy.

This adaptive management approach will assist with managing short-term changes in condition of the INTG TEC associated with poor climatic conditions such as drought and/or good climatic conditions such as above average rainfall, so that the INTG TEC continues to be maintained and, where possible improved.



## 12.0 References

- Commonwealth of Australia. (2018). *Guidelines for biological survey and mapped data*. Department of the Environment and Energy (DotEE). Canberra: Australian Government. Retrieved from https://www.agriculture.gov.au/sites/default/files/documents/guidelines-biological-survey-mapped-data.pdf
- DCCEEW. (2024). Environmental management plan guidelines. Department of Climate Change, Energy, the Environment and Water. Canberra: Commonwealth of Australia, Department of Climate Change, Energy, the Environment and Water. Retrieved from https://www.dcceew.gov.au/sites/default/files/documents/environmental-management-plan-guidelines.pdf
- DEWHA. (2008). Approved Conservation Advice for Iron-grass Natural Temperate Grassland of South Australia. Canberra: Department of the Environment, Water, Heritage and the Arts. Retrieved from http://www.environment.gov.au/biodiversity/threatened/communities/pubs/37-conservation-advice.pdf
- DEWHA. (2013). Significant Impact Guidelines 1.1 Matters of National Environmental Significance.

  Canberra: Commonwealth of Australia, Department of the Environment, Water, Heritage and the Arts.
- DEWR. (2007). EPBC Act Policy Statement 3.7: Peppermint Box (Eucalyptus odorata) Grassy Woodland of South Australia and Iron-grass Natural Temperate Grassland of South Australia. Government of Australia, Department of the Environment and Water Resources: Canberra.
- DoEE. (2016). Threat abatement plan for competition and land degradation by rabbits. Australian Government, Department of the Environment and Energy. Canberra: Commonwealth of Australia, Department of the Environment and Energy. Retrieved from https://www.dcceew.gov.au/sites/default/files/documents/tap-rabbit-2016.pdf
- DSEWPaC. (2011). Farming and protecting the Critically Endangered Iron-grass Natural Temperate Grassland. Canberra: Australian Government Department of Sustainability, Environment, Water, Population and Communities.
- EBS Ecology. (2023a). Goyder North Ecological Constraints Mapping. Adelaide: Letter report to Neoen by EBS Ecology.
- EBS Ecology. (2023b). Goyder North Renewable Energy Facility and Overhead Transmission Line Ecological Risk Assessment Summary. Adelaide: Report to Neoen by EBS Ecology.
- EPA. (1999). Stormwater Pollution Prevention, Code of Practice for the Building and Construction Industry. South Australia: Environment Protection Authority. Retrieved from https://www.epa.sa.gov.au/files/47790\_bccop1.pdf
- EPA. (2020). EPA Guideline for stockpile management. South Australia: Environment Protection Authority. Retrieved from https://www.epa.sa.gov.au/files/4771349\_guidelines\_stockpile.pdf
- Hyde, M. (1995). *The Temperate Grasslands of South Australia: Their Composition and Conservation Status*. Sydney: World Wide Fund for Nature Australia.
- IECA. (2008). Best Practice Erosion and Sediment Control. International Erosion Control Association Australasia.



- IUCN Species Survival Commission. (2012). *IUCN Red List categories and criteria, version 3.1, second edition*. IUCN.
- Specht, R. L. (1972). The Vegetation of South Australia (2nd Edition ed.). Adelaide: Government Printer.
- Threatened Species Scientific Committee. (2007). Commonwealth Listing Advice on Iron-grass

  Natural Temperate Grassland of South Australia. Canberra: Commonwealth of Australia.

  Retrieved from http://www.environment.gov.au/biodiversity/threatened/communities/pubs/leffusa.pdf.
- Turner, J. (2012). National Recovery Plan for the Irongrass Natural Temperate Grassland of South Australia ecological community 2012. Adelaide: Department of Environment and Natural Resources, South Australia. Retrieved from http://www.environment.gov.au/biodiversity/threatened/recovery-plans/national-recovery-plan-iron-grass-natural-temperate-grassland-sa.
- Umwelt. (2024). *Goyder North Stage 1 Offset Area Assessment*. Adelaide: Report to Neoen by Umwelt (Australia) Pty Ltd.
- Umwelt. (2025 in draft). Goyder North Wind Farm Construction and Environmental Management Plan. Adelaide: Report to Neoen by Umwelt (Australia) Pty Ltd.
- Umwelt. (2025a). *Goyder North Stage 1 and Stage 2 Native Vegetation Clearance Data Report.*Adelaide: Report to Neoen by Umwelt Austarlia Pty Ltd.
- Umwelt. (2025b). Goyder North Stage 1 and Stage 2 Wind Farm Iron-grass Natural Temperate
  Gassland of South Australia Threatened Ecological Community Assessment. Adelaide: Report
  prepared for Neoen by Umwelt Australia Pty Ltd.
- Umwelt. (2025c). *Goyder North Wind Farm Ecological Assessment Report*. Adelaide: Report to Neoen by Umwelt (Australia) Pty Ltd.

# **Appendix 1**

# Iron-grass Natural Temperate Grassland Patches







INTG	Survey	Landholder Details	INTG TEC	Area (ha)	Impacted
Patch #	Site(s)		<b>Condition Class</b>	(Before Any	
				Impact)	
1	LOM22		Class C	40.28	Yes
2	LOM27		Class C	13.40	
3	LOM26		Class C	19.39	Yes
4	LOM24, A6e		Class C	66.10	Yes
5			Unsurveyed	7.07	
6			Unsurveyed	0.05	
7	LOM13		Class C	7.46	Yes
8	LOM10, A6c		Class B	116.32	Yes
9			Unsurveyed	18.28	
10	LOM9		Class B	7.28	
11			Unsurveyed	0.94	
12	LOM8		Class B	10.38	
13	LOM14, LOM15		Class C	161.01	Yes
14			Unsurveyed	7.55	
15			Unsurveyed	0.58	
16			Unsurveyed	1.42	
17	LOM7		Class A	18.02	
18			Unsurveyed	2.22	
19	LOM5		Class B	6.43	
20			Unsurveyed	0.40	
21	LOM3, A6b		Class B	105.76	
22			Unsurveyed	10.14	
23	LOM28		Class B	0.24	
24	LOM16		Class B	12.84	Yes
25	A6f		Class B	99.33	Yes



INTG Patch #	Survey Site(s)	Landholder Details	INTG TEC Condition Class	Area (ha) (Before Any Impact)	Impacted
26			Class B	1.80	
27	LOM2		Class B	4.32	Yes
28			Unsurveyed	6.02	
29			Class B	324.73	Yes
30	LOM1		Class B	0.69	Yes
31			Unsurveyed	1.77	
32	LOM17, LOM18, A6a		Class B	527.50	Yes
33	LOM19		Class B	27.45	
34			Unsurveyed	42.42	
35	D6a		Unsurveyed	10.25	
36			Unsurveyed	1.51	
37			Unsurveyed	0.24	
38			Unsurveyed	0.31	
39			Unsurveyed	1.55	
40			Unsurveyed	0.55	
41			Unsurveyed	0.50	
42			Unsurveyed	1.67	
43			Unsurveyed	1.60	
44			Unsurveyed	0.82	
45			Unsurveyed	1.19	
46			Unsurveyed	5.47	
47			Unsurveyed	0.37	
48			Unsurveyed	0.23	
49	LOM6, LOM23 A6g		Class B	232.78	Yes
50			Unsurveyed	0.39	
51	D6b		Class B	2.22	Yes

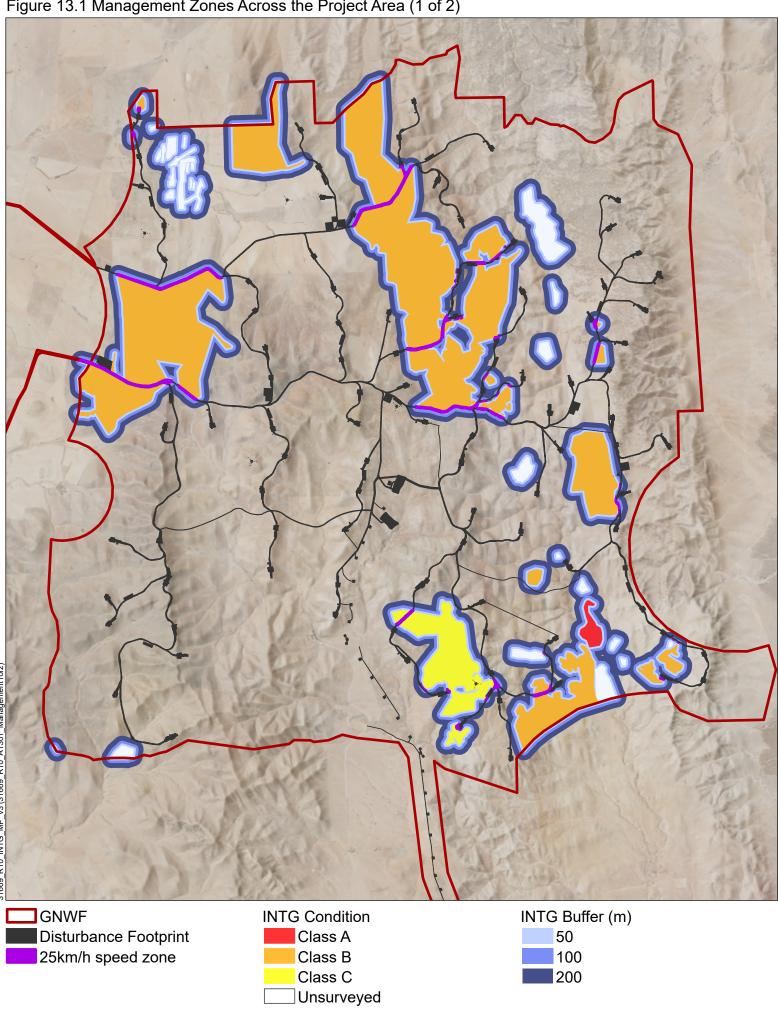
# **Appendix 2**

# **INTG Management Zones**





Figure 13.1 Management Zones Across the Project Area (1 of 2)





Data Source: Umwelt (2025), ESRI (2025), DEW (2022), DIT (2022) Neoen (2025)
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Figure 13.2 Management Zones Across the Project Area (2 of 2) GNWF INTG Buffer (m) **INTG Condition** ■ Disturbance Footprint 50 Class C 100 25km/h speed zone 200



Data Source: Umwelt (2025), ESRI (2025), DEW (2022), DIT (2022) Neoen (2025) Date Exported: 21/08/2025 11:17 AM Created by: sophie.haswell

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