

# Bluff Point Wind Farm and Studland Bay Wind Farm Annual Environmental Review 2020

31 March 2020



# Contents

<b>1. General Manager’s Statement</b>	<b>3</b>
<b>2. This report</b>	<b>4</b>
<b>3. Introduction</b>	<b>5</b>
3.1 Background	5
3.2 Buff Point Wind Farm and Studland Bay Wind Farm Overview	5
3.3 Environmental Management Plans	9
<b>4. General Environmental Management</b>	<b>11</b>
4.1 Public Complaints	11
4.2 Environmental Procedure or process changes	11
4.3 Waste produced	11
4.4 Non-Trivial Environmental Incidents and non-compliances	11
4.4.1 Environmental Incidents	11
4.4.2 Incident follow-up, mitigation and preventative measures	12
4.4.3 Non-compliance	12
4.5 Breaches of limits	12
4.6 Community consultation and communication and other relevant meetings	12
<b>5. Environmental Management Plans</b>	<b>14</b>
5.1 General Management	14
5.1.1 Reporting of bird and bat collisions	14
5.2 Orange-bellied Parrot Management	14
5.2.1 Vegetation management - on site program	14
5.2.2 OBP Habitat Plot	19
5.2.3 Orange bellied Parrot rehabilitation and offsets	19
5.2.4 Orange-bellied Parrot Turbine Shutdown Contingency	19
5.3 Eagle management	19
5.3.1 Monitoring of eagle collision with wind turbines	19
5.3.2 Minimising food resources on site	20
5.3.3 Rehabilitation of injured eagles	20
5.3.4 Understanding the factors involved in eagle collision risk	20
5.3.5 Annual appraisal of technologies 2020	20
<b>6. Commonwealth EMPs</b>	<b>22</b>
6.1.1 Commonwealth Bird and Bat Monitoring Plan	22
6.1.2 Commonwealth Vegetation Management Plan	22
6.1.3 Woolnorth to Smithton Transmission Line	22
<b>7. Other Environmental Actions</b>	<b>23</b>
7.1 Supporting the Tasmanian Threatened Eagles Recovery Plan review	23
7.2 Environmental Management System	23
7.3 Annual audit reports	23
7.4 Emergency preparedness	24
<b>8. Glossary</b>	<b>25</b>

# 1. General Manager's Statement

This is the 18<sup>th</sup> Annual Environmental Review (AER) published for the Bluff Point Wind Farm (BPWF) and the Studland Bay Wind Farm (SBWF) projects. The AER has been prepared according to Condition G5 of the Environment Protection Notices under which the projects are regulated (BPWF EPN no. 7421/2 and SBWF EPN no. 7423/3). According to G5, an Annual Environmental Review, that is publicly available ([www.woolnorthwind.com.au](http://www.woolnorthwind.com.au)), must be submitted to the Director of the Environment Protection Authority (EPA) by the 31<sup>st</sup> of March of each calendar year for the reporting period (calendar year). This AER reporting period is January 1 2020 to December 31 2020.

The information contained in this AER has been carefully prepared by our environmental team, in collaboration with project staff.

I acknowledge and endorse this report.



**Stephen Ross**  
**General Manager**  
**Woolnorth Renewables**

## 2. This report

This AER covers the period 1 January – 31 December 2020 and is provided to fulfil condition G5 of the BPWF and SBWF Environment Protection Notices (BPWF EPN no. 7421/2 and SBWF EPN no. 7423/3). It also contains information relevant to the conditions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) Approval (no.) 2000/12. Additionally, this report provides a summary of additional work undertaken at these sites to address any environmental issues and/or to improve environmental management of the sites. Table 1 contains details of the sections within this report and the specific purpose of each section.

**Table 1. Sections contained within this report and details of reporting requirements met.**

Sections of this report	Compliance details
1.1 <b>General Manager’s Statement</b>	Requirement of G5 (1.1) of Environment Protection Notices (EPNs) No. 7421/2 (Woolnorth Bluff Point Wind Farm) and No. 7423/3 (Woolnorth Studland Bay Wind Farm).  <b>G5 requirements: 1.1</b>
<b>Introduction</b> 3.1 Background 3.2 BPWF & SBWF 3.3 Environmental Management Plans	General information
<b>General Environmental Management</b> 4.1 Public complaints 4.2 Environmental procedure or process changes 4.3 Summary of waste 4.4 Nontrivial Environmental incidents & non compliances 4.5 Breaches of specific limits 4.6 Summary of community consultation and communication	Reporting on commitments contained within Environment Protection Notices (EPNs) No. 7421/2 (Woolnorth Bluff Point Wind Farm) and No. 7423/3 (Woolnorth Studland Bay Wind Farm)  <b>G5 requirements: 1.2, 1.3, 1.4, 1.5, 1.7, 1.10</b>
<b>Environmental Management Plans (EMPs)</b> 5.1 General Management 5.2 Orange –bellied Parrot Management 5.3 Eagle Management Plan 5.4 Commonwealth EMPs	Reporting on commitments contained within EPNs, EPBC Approval and: <ul style="list-style-type: none"> <li>○ Bluff Point Wind Farm State Environmental Management Plan</li> <li>○ Studland Bay Wind Farm State Environmental Management Plan</li> <li>○ Tasmanian Wedge-tailed Eagle and White-bellied Sea-Eagle Nesting Habitat Management Plan</li> <li>○ Transmission line EMPs</li> </ul> <b>G5 requirements: 1.6, 1.9</b>
<b>Other Environmental Actions/issues</b> 6.1 Eagle Recovery Plan 6.2 Environmental Management System 6.3 Annual audits 6.4 Emergency preparedness	General Information  <b>G5 requirements: 1.8</b>
<b>Glossary</b>	

## 3. Introduction

### 3.1 Background

The BPWF and SBWF are located in far north-west Tasmania. The wind farms are owned by Woolnorth Wind Farm Holding Pty Ltd (trading as Woolnorth Renewables (WNR)), a joint venture between Shenhua Clean Energy Holdings (75%) and Hydro Tasmania (25%). WNR manage and operate the wind farms and associated transmission lines, including compliance with obligations of EPNs and other approval conditions (EPBC, Local Government). The environmental regulatory compliance obligations of BPWF and SBWF are the focus of this report.

### 3.2 Buff Point Wind Farm and Studland Bay Wind Farm Overview

The BPWF and SBWF consist of wind turbines placed on towers at a suitable height to generate electricity, underground cables between turbines, an electrical substation, control room and ancillary buildings (central to the turbine areas), roads, fences and other associated infrastructure. The wind farms connect to the electricity grid via a 110kV transmission line (approximately 50 km in length) to the Smithton substation.

BPWF was developed in two stages. The first stage comprised the construction of six turbines, with an electrical connection to the Smithton substation via a 22kV power line. Stage 2 comprised an additional 31, 1.75MW turbines, and the construction of the 110kV transmission line from the wind farm switchyard to the Smithton substation. In total BPWF comprises 37 Vestas V66, 1.75MW turbines and was fully commissioned in August 2004 with a generation capacity of 64.75MW. Refer to Figure 1 for the layout of BPWF.

Construction commenced on SBWF in 2006 with a nominal capacity of 75MW. The development of SBWF included construction of a spur transmission line to connect to the existing 110kV transmission line between BPWF and the substation at Smithton. SBWF consists of 25 Vestas V90, 3MW turbines and was fully commissioned by 1 June 2007. Figure 2 details the layout of SBWF, while the transmission line route is shown in Figure 3.

BPWF and SBWF operate under joint Planning Scheme Permits (PA10/00, 176/00) and separate EPNs (replacing the original conditions attached to PA 10/00 & 176/00). The Circular Head Council issued the Planning Scheme Permits while the EPNs were issued by the Tasmanian Environment Protection Authority (EPA). BPWF and SBWF also operate under an Approval issued by the Australian Government Department of the Environment and Heritage (now the Department of Agriculture, Water and the Environment (DAWE)) under the *Environment Protection and Biodiversity Conservation Act 1999*.

Attached to these legal instruments are environmental conditions with which the wind farms must comply. The preparation of this AER is a requirement of each wind farms' EPN. Environmental Management Plans, approved in accordance with the EPNs and Approval conditions, also outline reporting commitments and requirements. This report contains the relevant reporting requirements for the BPWF, SBWF and the associated 110 kV Transmission Line (including the SBWF 'spur line').

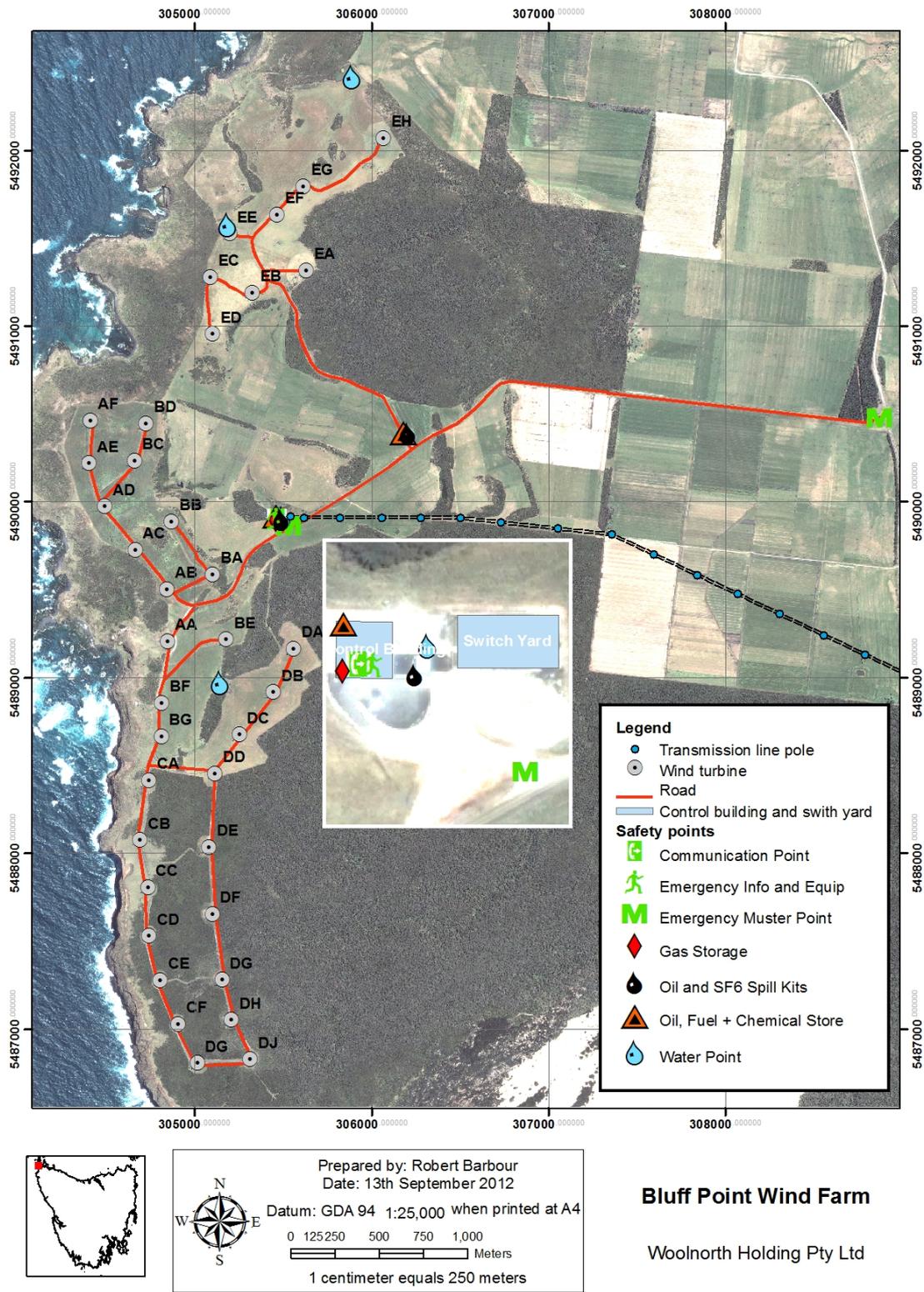


Figure 1. Bluff Point Wind Farm

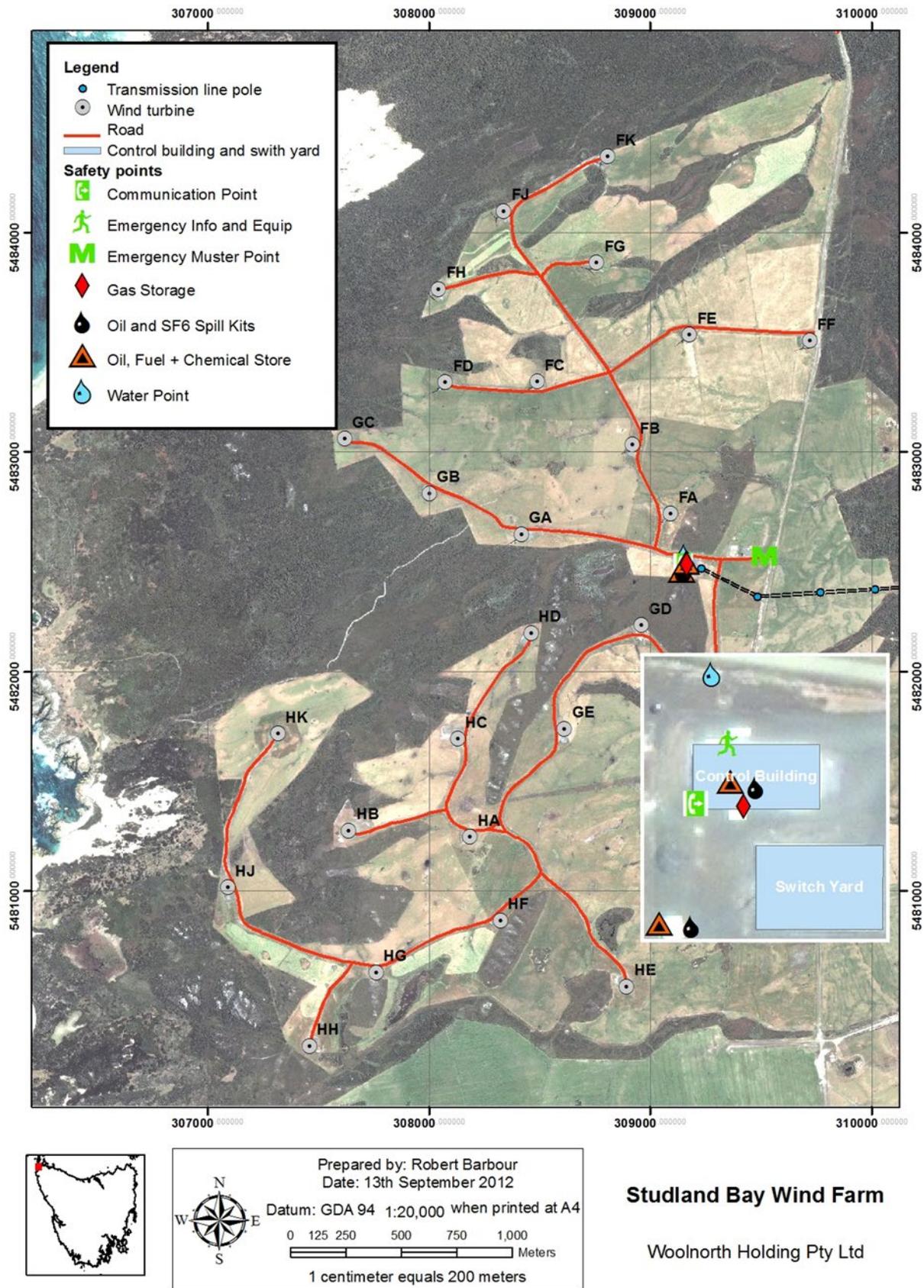


Figure 2. Studland Bay Wind Farm

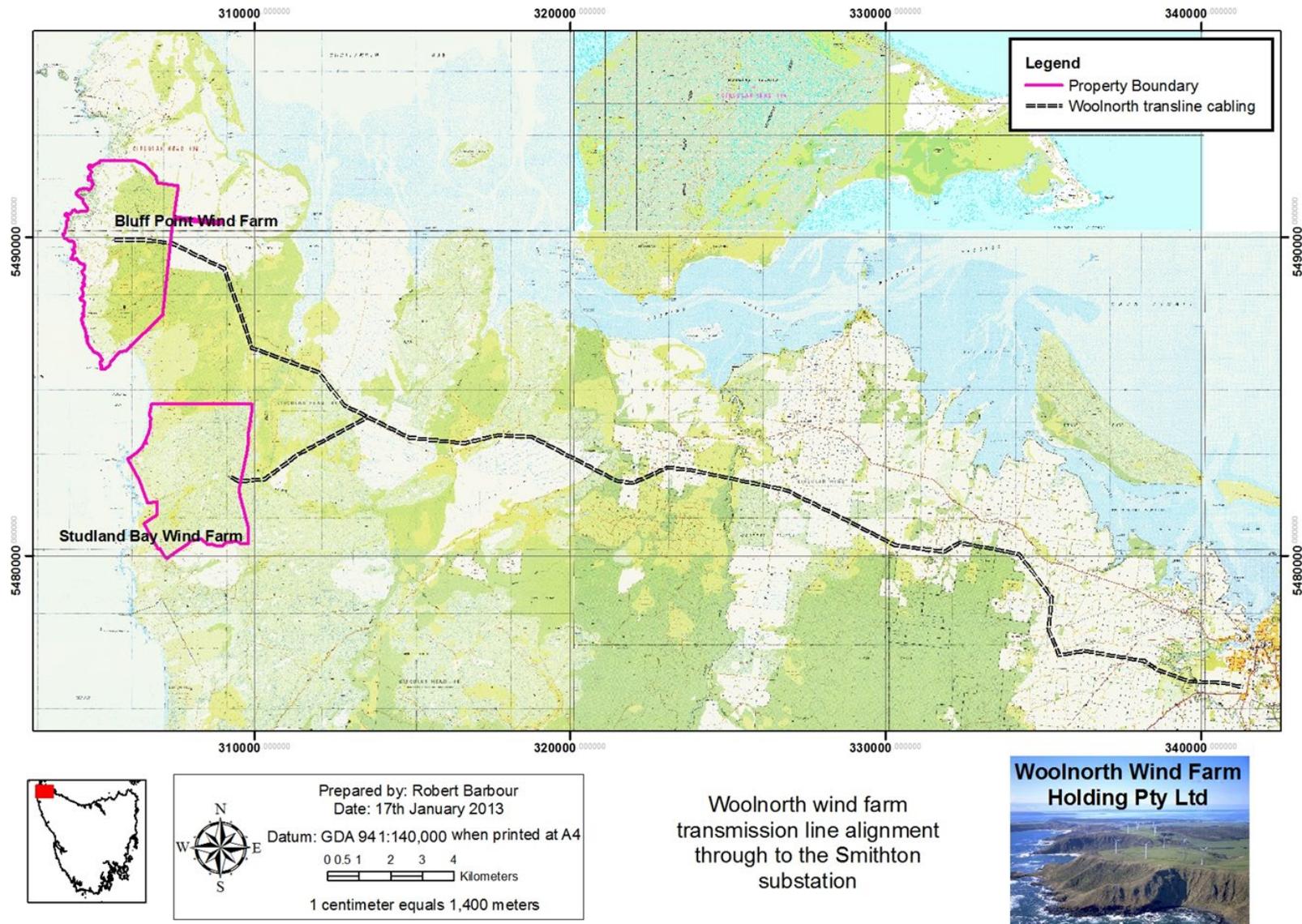


Figure 3. Transmission line alignment

### 3.3 Environmental Management Plans

As reported in previous AERs, in December 2015, the BPWF and SBWF State EMPs were reviewed. The EMPs were re-approved by the EPA in March 2016 and submitted for review and re-approval in February 2021. The EMPs were restructured and presented under three separate headings:

1. General management
2. Orange-bellied Parrot Management
3. Eagle management.

This AER presents the results of relevant actions under the currently approved EMPs and this information is collated and presented in Section 5 of this report.

All necessary Environmental Management Plans (EMPs) for BPWF and SBWF were prepared and approved as required by the approval conditions, permit and/or EPNs. The following tables (Tables 2 and 3) summarise the currently relevant management plans and their details (the current Departmental names are used).

**Table 2. Status of EMPs for BPWF and SBWF.**

Environmental Management Plan	Approved by	Last approved	Status
Vegetation Management Plan	DAWE*	2005	Active, few relevant actions
Bird and Bat Monitoring Plan	DAWE *	2005	Active, few relevant actions
Bluff Point Wind Farm Environmental Management Plan	EPA	2016	Active
Studland Bay Wind Farm Environmental Management Plan	EPA	2016	Active
Tasmanian Wedge-tailed Eagle and White-bellied Sea-Eagle Nesting Habitat Management Plan	DAWE *	2007	Active, but all actions completed

\*various previous Department names.

In addition, the following plans and reports were prepared and approved prior to commencement of construction of the Woolnorth to Smithton transmission line.

**Table 3. Status of EMPs for the 110kV Transmission Line**

<b>Environmental Management Plan</b>	<b>Approved by</b>	<b>Last approved</b>	<b>Status</b>
Transmission Line Bird Strike Mitigation Plan	EPA	2003	Inactive
	DAWE *	2003	Active, few relevant actions
Transmission Line Vegetation Management Plan	EPA	2003	Inactive, few relevant actions
Transmission Line Vegetation Management to Deter the Orange-bellied Parrot	EPA	2003	Inactive
	DAWE *	2003	Active, few relevant actions
Transmission Line Bird Strike Monitoring Plan	DAWE *	2003	Active
	EPA	2003	Inactive, few relevant actions

\*various previous Department names.

## 4. General Environmental Management

### 4.1 Public Complaints

There were no public complaints (in relation to environmental or other matters) received by WNR during the 2020 reporting period.

### 4.2 Environmental Procedure or process changes

During the 2020 reporting period there were no significant procedural or process changes relating specifically to the environmental regulation or management of the sites.

### 4.3 Waste produced

During the 2020 reporting period, the following waste data was collected (Table 4).

**Table 4. Waste streams and quantities documented in 2020.**

	General waste (m <sup>3</sup> )	Liquid hydrocarbon (L)	Recycling wastes (m <sup>3</sup> )	Metal recycling (t)
BPWF	108	2000	10	combined
SBWF	54	1000	5	combined
Total	162	3000	15	62.9

Waste streams and volumes are regularly monitored and where possible materials are recycled rather than being disposed of as general waste. Waste volumes were slightly higher than previous reporting periods. A licenced contractor disposes of all waste, including waste classified as hazardous.

### 4.4 Non-Trivial Environmental Incidents and non-compliances

#### 4.4.1 Environmental Incidents

It is a requirement that all reportable incidents are reported to the EPA and sections of Tasmanian Department of Primary Industries, Parks, Water and Environment (DPIPWE). This requirement is outlined in the EPNs and the reporting procedure prescribed in the BPWF and SBWF EPNs and the State EMPs. Bird and bat related incidents are reported in Section 5 of this report.

There were no reportable environmental incidents at BPWF and SBWF during the 2020 reporting period.

Other non-reportable/trivial incidents were documented and managed by WNR through internal procedures.

#### **4.4.2 Incident follow-up, mitigation and preventative measures**

As there were no reportable/non-trivial environmental incidents, there are no follow up, mitigation or preventative measures to report.

#### **4.4.3 Non-compliance**

WNR continued to comply with the latest approved State EMPs.

There were no non-compliances with the EPN or other approval conditions identified. Internal audits conducted as a part of the WNR internal audit schedule found no EPN or other approval condition related non-compliances. An external audit, against ISO 14001, was conducted in December 2020 and no non-conformance were identified. See section 7.

#### **4.5 Breaches of limits**

There were no breaches of limits specified in the EPNs or any of the regulatory approved EMPs.

#### **4.6 Community consultation and communication and other relevant meetings**

A summary of community and stakeholder consultation and communication for the reporting period is provided in Table 5.

**Table 5. A summary of community and stakeholder consultation, communication and other relevant activities / meetings for the reporting period 2020**

Date	Activity or meeting	Comment
<b>Activities undertaken and outlined in the approved EMPs are outlined in the relevant sections of this report. Other management activities and meetings held in conjunction or addition to the approved EMPs are listed in this table.</b>		
Regularly throughout the year	Visitor tours of BPWF by Woolnorth Tours	Woolnorth Tours ( <a href="http://www.woolnorthtours.com.au">www.woolnorthtours.com.au</a> ) conducts tours of the BPWF. In 2020, approximately 2278 members of the public visited the site.
Regularly throughout the year	Audits and emergency preparedness sessions	Various audits and training sessions conducted throughout the year in accordance with WNR's internal schedules.
Regularly throughout the year	Discussions with VDL Farms	Discussions with VDL Farms occurs regularly throughout the year to discuss and action a range of topics.
Throughout the year	Funding of various community events/groups	Twilight on the Duck, Pony club championship (Smithton), UTAS Springboard (Smithton), Graze the Region, Raptor Refuge, Circular Head Show, RFDS Mobile Dental Van
February	EPA meeting	General meeting including eagle management.
July	UTAS eagle tagging	In kind support for UTAS student
December	External Audit	External audit by BSI for ISO 14001 certification
December	Devil trapping	DPIPWE devil team
December	Woolnorth Wind Farm Springboard to Higher Education Bursary presentation.	Present University of Tasmania Woolnorth Wind Farm Springboard to Higher Education Bursary at Smithton High School and Circular Head Christian School

## 5. Environmental Management Plans

### 5.1 General Management

#### 5.1.1 Reporting of bird and bat collisions

Section 3.1 of the State EMPs for BPWF and SBWF respectively detail the reporting requirements for birds and bat mortalities listed or not listed under the *Threatened Species Protection Act 1995* (TSPA).

No dead or injured birds or bats were identified during the reporting period.

### 5.2 Orange-bellied Parrot Management

#### 5.2.1 Vegetation management - on site program

Both wind farm sites were inspected for the presence of Orange-bellied Parrot (OBP) foraging weeds. Specifically, these weeds are:

- Wireweed
- Fathen
- Nettle-leaved Goosefoot
- Water buttons
- Chickweed.

The inspections focus on identifying the presence of the above weed species with spraying (or other actions) undertaken where necessary to remove them. Other weed species, if relevant, are identified and noted during the surveys. The specific methods used are detailed below.

#### Methods

In late January, prior to the OBP northward migration, a verification survey was conducted at BPWF and SBWF to assess if there were any areas that may attract OBPs. The areas assessed were:

1. Turbine areas;
2. Roads and hardstands areas; and
3. General pastures.

The objective of the survey is to confirm that the average ground cover of known OBP foraging species (listed above) either flowering or producing seed, does not exceed an average of 10% across the total site, and that no localised area (close to a wind turbine) exceeds 30%. A staged design is used, which involves:

#### 1. Turbine selection

Six turbines are chosen at random across the site.

#### 2. Turbine surveys – PASS/FAIL triggers

- At each turbine (out to 50m from the turbine base), seven 1m x 1m quadrats are randomly selected, and the species contained in each quadrat estimated;
- If the combined average of OBP foraging species (listed above) of these quadrats is less than 20%, the turbine zone is deemed a PASS;
- If the combined average of OBP foraging species (listed above) of these quadrats is greater than 20%, another seven quadrats are randomly selected, and the average of all 14 taken; and
- If the new average is above 22%, the turbine zone is a FAIL and requires treatment/management actions and another turbine is selected at random to be tested.

### **3. Site wide calculations – PASS/FAIL triggers**

- If the combined average of all PASS quadrats is less than 7.0%, then the site is a PASS;
- If the combined average of all PASS quadrats is greater than 7.0%, then another two turbines are selected (and the turbine survey methodology described above applied); and
- Following the additional two turbine surveys, the combined average of all PASS quadrats must be less than 7.5%. Greater than this indicates a FAIL for the site and a thorough inspection of all cleared areas within close proximity of turbines is undertaken to identify areas that require treatment/management actions.

A PASS indicates a less than 5% likelihood of the site having a genuine average greater than the trigger level. A FAIL indicates that there is a greater than 5% likelihood that the plant coverage may in fact be greater than the trigger level.

### **Roads and Hardstands**

Roads and hardstands have previously been identified as areas where OBP species can commonly be present. The random quadrat surveys at each turbine (described above) sample road and hardstand areas. Outside of these, all roads within 200m of any turbine and all hardstands are inspected for the presence of known OBP food species (see list above) and treatment/management actions are undertaken where necessary.

### **General pastures**

No OBPs have been recorded foraging at the BPWF or SBWF sites since the development began studies in 2000. Grazing management, fertiliser regimes and pasture species composition are managed by the VDL Farms and assessed on an as needs basis. The random quadrat surveys at turbines (described above) sample general pastures across the site (according to the turbines selected) and management intervention is undertaken when triggers are exceeded (described above).

## **Results**

### **BPWF**

Turbines EF, AF, AB, BA, BG and DF were randomly selected (using Random function in Excel).

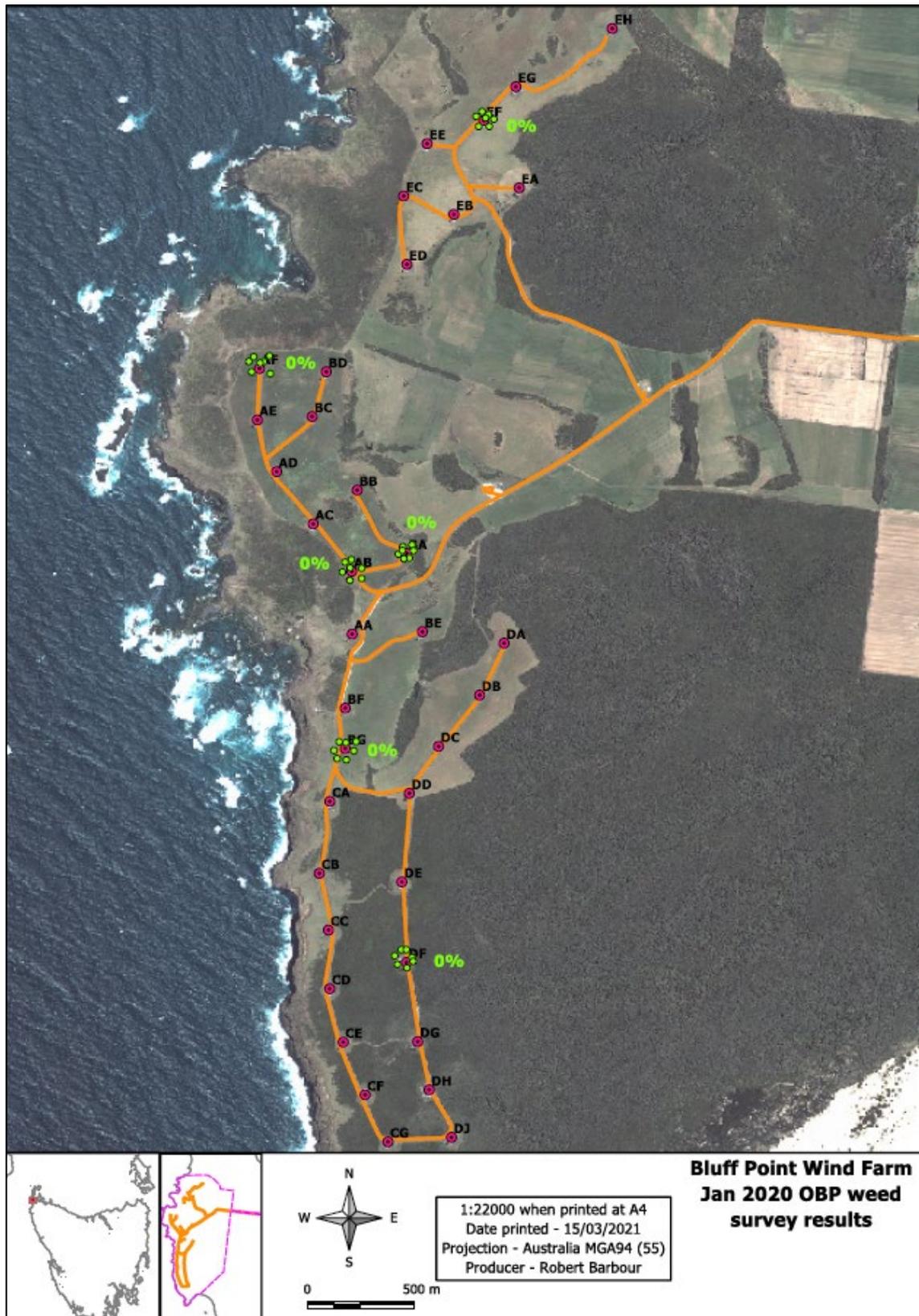


Figure 4. BPWF weed survey locations and combined average results (%) of OBP foraging species

Figure 4 (above) outlines the combined average of OBP foraging species at each sampled turbine site. As can be seen from the results, none of the five OBP weed species were identified in any of the surveyed wind turbine areas and hence all wind turbines areas were deemed a 'PASS'. On the basis of the wind turbine area results, the site was also deemed a 'PASS'.

During the surveys there were no OBP weed species found in open pastures indicating the surveys and any control undertaken by VDL Farms during 2020 was effective. Roads and hardstands were assessed by WNR personnel during the formal quadrat surveys and no OBP weed species were identified.

The site was therefore considered free of the key OBP attracting weed species.

In Autumn 2020, all roads and hardstands across the site were sprayed with herbicide for maintenance purposes. The herbicide application will assist in preventing the establishment of OBP weed species in these areas.

### **SBWF**

Turbines FD, FF, FB, GD, HG and HE were randomly selected (using Random function in Excel).

Figure 5 below outlines the combined average of OBP foraging species at each sampled turbine site. As can be seen from the results none of the five OBP weed species were identified in any of the surveyed wind turbine areas and hence all wind turbines areas were deemed a 'PASS'.

During surveys across the balance of the property there were no areas where OBP weed species were identified indicating the surveys and any control undertaken by VDL Farms during 2020 was effective. Roads and hardstands were assessed by WNR personnel during the formal quadrat surveys and no OBP weed species were identified.

The site was therefore considered free of the key OBP attracting weed species.

In Autumn 2020, all roads and hardstands across the site were sprayed with herbicide for maintenance purposes. The herbicide application will assist in preventing the establishment of OBP weed species in these areas.

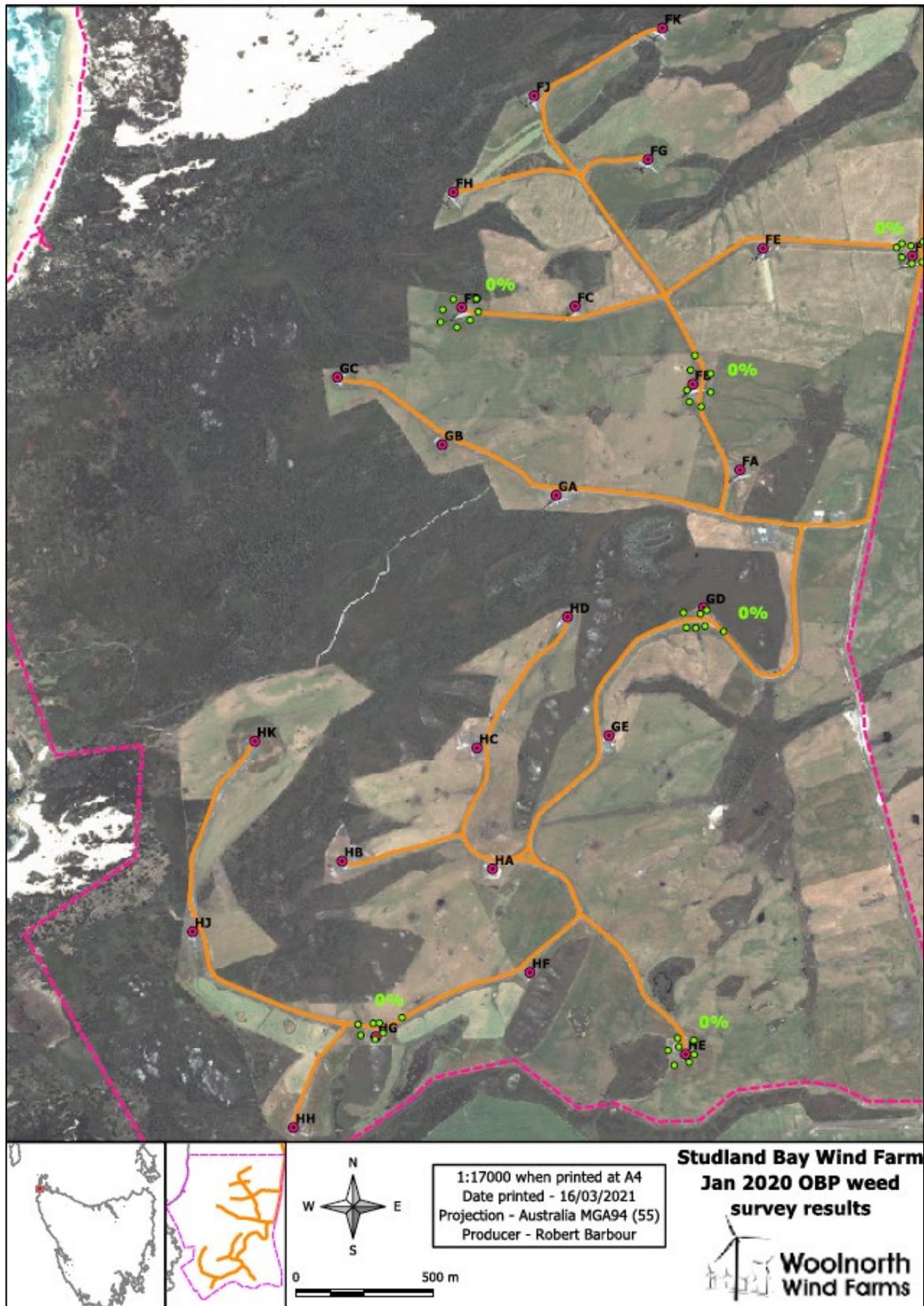


Figure 5. SBWF weed survey locations and combined average results (%) of OBP foraging species

## 5.2.2 OBP Habitat Plot

The OBP habitat plot, established in 2008/09, is visited at least twice yearly and photographs taken to document its progress (Figure 6). No other actions were undertaken in 2020.



Figure 6. The OBP roost plot, from south-east.

## 5.2.3 Orange bellied Parrot rehabilitation and offsets

No OBPs were found dead or injured (at either site) and hence no rehabilitation or offsets were required.

## 5.2.4 Orange-bellied Parrot Turbine Shutdown Contingency

No OBPs, or flocks of Blue-winged Parrots (indicators of OBPs), were observed at either BPWF or SBWF during 2020 that required the shut-down triggers developed to be implemented. Therefore, no management actions (as specified in the State EMPs) were undertaken.

## 5.3 Eagle management

### 5.3.1 Monitoring of eagle collision with wind turbines

An updated monitoring strategy was approved by the EPA in December 2013 and by the DoEE in June 2014. This monitoring strategy remains focussed on monitoring BPWF and SBWF for eagle collisions. The strategy relies on ad-hoc monitoring and surveillance by site personnel.

A series of benchmarks have been developed based on the calculated long-term collision rate (for each site) and if reached, trigger an escalating response. All responses have the objective of investigating the detected eagle mortalities (to understand or determine the root cause/s) and to determine if there has been a change (increase) in the average annual collision rate.

## **Methods**

Monitoring is conducted by all personnel that are working on the sites. This includes WNR, VDL Farms and any consultants employed to work on the sites. The requirement to report any dead or injured eagles (or other birds and bats) to WNR, or their representative, is managed and reinforced through the general and site induction processes.

## **Results**

There were no dead or injured eagles detected during the reporting period at either BPWF or SBWF and therefore no management actions were required.

### **5.3.2 Minimising food resources on site**

WNR continued to minimise potential eagle food resources on site by preventing any calving on the land and by removing any dead cattle or other animals from turbine areas. This has been achieved by regular monitoring of stocked areas by farm staff. No sheep are grazed on the wind farm sites. In addition, a prey control program is implemented when there is a significant or unusual density of WTE or WBSE prey species (wallabies and pademelon) observed/identified on site. A prey control program was not deemed necessary and therefore not implemented.

### **5.3.3 Rehabilitation of injured eagles**

There were no eagle collisions or injured eagles observed at either site during 2020 and therefore no eagles were rehabilitated during the reporting period.

### **5.3.4 Understanding the factors involved in eagle collision risk**

WNR is committed to monitoring possible technologies and methods to improve our understanding of the factors involved in eagle collisions with wind turbines. The majority of testing and research, however, is undertaken at the Musselroe Wind farm and includes behavioural analyses, genetic testing, GPS tracking, radar sensing, breeding studies, camera trap analyses. These studies are reviewed in the Musselroe Wind Farm Annual Environmental Report, available on the Woolnorth Renewables public website ([MRWF AER 2019/20](#)).

### **5.3.5 Annual appraisal of technologies 2020**

The assessment of new technologies for understanding eagle collision risk, collision factors and potential mitigation options continued throughout 2020. This included the review of technical reports and papers, summaries of conference proceedings and workshops, review of technology provider's websites and discussions or meetings with technology suppliers.

In 2019 the Robin Radar Max system was identified by WNR as an appropriate technology to reduce the risk of avian collisions with wind turbines at the Musselroe Wind Farm site. The system comprises of a phased array radar which is designed specifically to detect birds. The radar is able to detect a bird flight and through a custom software program provide signals to the wind farm control system to curtail/shut down the appropriate turbines.

The Robin Radar system was installed in mid-2020 and is currently working through a testing and commissioning phase. Once operational the results will be carefully analysed to determine if this technology may be applicable to the SBWF and BPWF sites.

Other wind farm developments currently in the construction and commissioning phase in Tasmania are employing different avian detection systems, such as Identiflight. Where possible, WNR will collaborate with these developments, where practicable, to share any lessons which may be generated.

Throughout the reporting period, the literature published focused on assessing efficiencies being developed in pre-existing technologies. Much of this research was conducted in a northern hemisphere setting or at offshore wind farms. Although not all of the findings are relevant to the Tasmanian experience, the key outcome themes are applicable.

Probably the most significant publications and presentation of findings through 2020 came from the international Wind and Wildlife Research Meeting held in December (<https://wwrm2020.brand.live/WindWildlifeResearchMeeting>). All aspects of wildlife management and wind farm impacts were addressed. The sections on Eagles & Raptors and Risk Reduction were most relevant to BPWF and SBWF. New technology and strategies for monitoring bird and bat collisions and flight paths were presented, but nothing that presented material improvements beyond that offered by the Robin or Identiflight systems.

WNR will continue to monitor the progression of technologies, research projects and relevant literature.

## 6. Commonwealth EMPs

Actions that have been developed in response to the Commonwealth approval conditions are contained within the following EMPs:

- Bird and Bat Monitoring Plan (specifically bird utilisation surveys and collision monitoring of turbines)
- Vegetation Management Plan (specifically habitat management for OBPs);
- OBP Winter Habitat Management Plan
- Wedge-tailed Eagle and White-bellied Sea-eagle Nesting Habitat Management Plan (actions relating to wedge-tailed eagles)
- Transmission line EMPs.

All actions in the OBP Winter Habitat Management Plan and Tasmanian Wedge-tailed Eagle and White-bellied Sea-eagle Nesting Habitat Management Plan are completed and have been reported on in previous AERs or PERs. Relevant EMPs are discussed below.

### 6.1.1 Commonwealth Bird and Bat Monitoring Plan

Approval was obtained from the Commonwealth to cease the generic bird utilisation surveys and to modify the turbine mortality searches from generic to an eagle-focus (as detailed in the 2010 Annual Environmental Performance Report). All results are reported in Section 5.1.1 above.

### 6.1.2 Commonwealth Vegetation Management Plan

The actions in this plan that are relevant to the Commonwealth are those relating to habitat management of OBPs. The results of these actions are reported in Section 5.2.

### 6.1.3 Woolnorth to Smithton Transmission Line

Various management plans apply to the Woolnorth to Smithton 110kV transmission line. These are:

- Transmission Line Bird Strike Mitigation Plan;
- Transmission Line Vegetation Management Plan;
- Transmission Line Vegetation Management to Deter the Orange-bellied Parrot; and
- Transmission Line Bird Strike Monitoring Plan.

Most actions contained in these plans were completed during the construction of the transmission line. The remaining actions include vegetation/weed surveys and control (if required) to deter OBPs from the transmission line corridor and surveys of the corridor for evidence of bird collisions. These actions were undertaken as required by the relevant plans. No bird collisions were identified during the 2020 reporting period.

## 7. Other Environmental Actions

### 7.1 Supporting the Tasmanian Threatened Eagles Recovery Plan review

WNR are supporting the review of the Tasmanian Threatened Eagles Recovery Plan (2006-2010) through involvement in a DPIPWE led reference group. WNR are providing input in collaboration with, and on behalf of, other companies operation or developing wind farms in Tasmania. The review of the existing/current Plan is a required step in the decision to establish a new plan. As outlined in previous AERs, WNR has suggested an updated Plan would be useful in guiding management actions for both species. WNR will continue to support the Plan review.

### 7.2 Environmental Management System

WNR (including operations at BPWF and SBWF) operates its business under a Health, Safety and Environmental management system. WNR (including BPWF and SBWF) was certified to ISO 14001 in 2013 and has since retained this certification.

No non-conformance was identified in the 2020 ISO 14001 external audit.

The HSE system includes Policies, Procedures, Forms and other documents that assist to:

- Establish and set high level directives to all areas of the business.
- Document accountabilities and responsibilities.
- Effectively manage business and operational risks.
- Develop procedures and protocols to effectively control and manage operational risks and issues.
- Establish methods to check and review system performance and implementation.
- Ensure a systematic continuous improvement cycle is established and implemented.

### 7.3 Annual audit reports

Internal and external audits of the two wind farm sites are conducted in accordance with an audit schedule. The audit schedule is established at the commencement of each calendar year and reviewed on a regular basis to ensure the schedule is being followed. Internal audits are conducted in accordance with system procedures. All audit findings are entered into a dedicated database and audit actions tracked. Table 7 includes a summary of the audits (relevant to this report) conducted during the reporting period.

**Table 7. Summary of audits in 2020**

Year	Audit type
2020	Environmental audit at BPWF and SBWF
2020	Operational audit at BPWF and SBWF
2020	External audit against ISO 14001

Audits conducted over the period continue to check environmental performance and drive continuous improvement in environmental management at both sites. All audit actions including opportunities for improvement have been evaluated and where possible actions developed to address them. Implementation of actions is tracked at various levels.

#### 7.4 Emergency preparedness

Throughout the reporting period, several emergency preparedness exercises were conducted. These were completed according to an annual plan and included both desktop and field-based scenarios. The exercises conducted (relevant to this report) are shown in the table below.

**Table 8. Emergency preparedness exercises conducted in 2020**

<b>Activity</b>	<b>Site</b>	<b>Activity Type</b>
Major incident response	BPWF/SBWF	Corporate/desktop
Immobilised worker in nacelle	BPWF/SBWF	Desktop
Transmission line incident	BPWF/SBWF	Desktop

## 8. Glossary

AER	Annual Environmental Review
BPWF	Bluff Point Wind Farm
DPIPWE	Tasmanian Department of Primary Industry Parks Water and Environment
DAWE	Commonwealth Department of Agriculture, Water and the Environment
DoEE	Commonwealth Department of Environment and Energy
Eagle	WTE or WBSE
EMP	Environmental Management Plan
EPA	Tasmanian Environment Protection Authority
EPBC	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPN	Environment Protection Notice
OBP	Orange-bellied Parrot ( <i>Neophema chrysogaster</i> )
SBWF	Studland Bay Wind Farm
TSPA	Tasmanian <i>Threatened Species Protection Act 1995</i>
WBSE	White-bellied Sea-Eagle ( <i>Haliaeetus leucogaster</i> )
WNR	Woolnorth Wind Farm Holding Pty Ltd
WTE	Wedge-tailed Eagle ( <i>Aquila audax fleayi</i> )

### Species names referred to in text

#### Plants

Chickweed	<i>Stellaria media</i>
Fathen	<i>Chenopodium album</i>
Nettle-leaved goosefoot	<i>Chenopodium murale</i>
Water buttons	<i>Cotula coronopifolia</i>
Wireweed	<i>Polygonum aviculare</i>

#### Birds

Wedge-tailed eagle	<i>Aquila audax fleayi</i>
White-bellied sea eagle	<i>Haliaeetus leucogaster</i>
Orange-bellied parrot	<i>Neophema chrysogaster</i>

#### Mammals

Wallaby (rufous or bennetts)	<i>Lagorchestes hirsutus</i> or <i>Macropus rufogriseus</i>
Pademelon	<i>Thylogale billardierii</i>
Tasmanian Devil	<i>Sarcophilus harrisii</i>