

EPURON

# St Patricks Plains Wind Farm

Community information days

Bothwell & Miena

February 2021



Welcome and thank you to everyone for coming today.

I acknowledge and pay respect to the elders that are here today.

I acknowledge those who have passed before us and acknowledge Tasmanian Aboriginal people who are attending this event.

## Topics we will talk about

- ▶ Why St Patricks Plains
- ▶ What are the changes to the layout
- ▶ How we have consulted
- ▶ Concerns raised

## The Big Picture

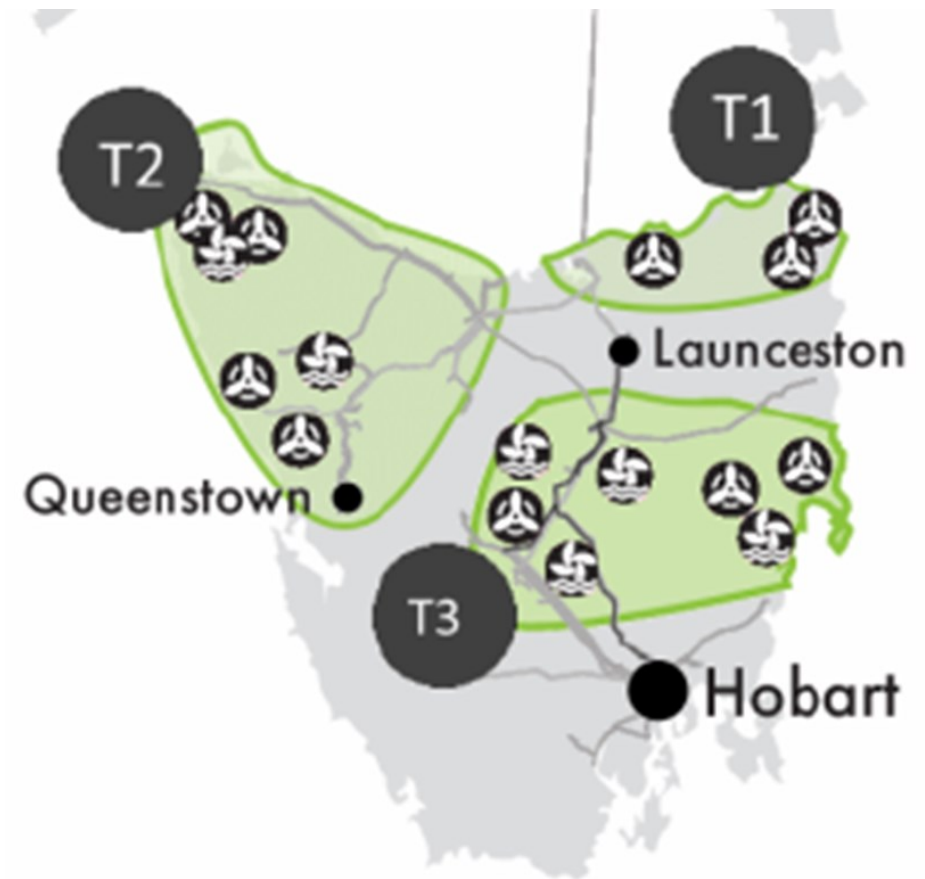
- ▶ Aiming to connect up to 300MW into the main transmission lines in the Central Highlands, 10km from Miena, 30km from Bothwell.
- ▶ We are about half way through the planning studies.
- ▶ The previous layout of 67 turbines has been revised to 50.
- ▶ The revisions respond to a number of drivers including:
  - How eagles use the site
  - Community input
  - Flora and fauna

## How does it compare with Cattle Hill Wind Farm?

Cattle Hill	St Patricks Plains
48 wind turbines	50 wind turbines
148.5 MW	Up to 300 MW
Each turbine 3 MW	Each turbine up to 6.2 MW
Each blade 70m	Each blade up to 90m
Hub height 100m	Hub height up to 150m
Peak workforce 150	Peak workforce 200
Permanent O&M jobs – 10-20	Permanent O&M jobs – 12-20
Other jobs eg environment etc 2-4	Other jobs eg environment etc 2-4
Homes powered annually 63,500	Homes powered annually 133,000

## Why St Patricks Plains?

- ▶ In 2017 Epuron identified the site has:
  - Excellent wind energy potential
  - Freehold land
  - Simple connection to the grid
- ▶ Formal planning process began in 2019.
- ▶ The Australian Energy Market Operator (AEMO) identified the Tasmanian Midlands as a Renewable Energy Zone in 2019.



## Renewable Energy Zones (REZ)

In 2020 the Australian Energy Market Operator (AEMO) released its Integrated System Plan to plan the optimal network of the future.

The Midlands REZ will play a significant Role.

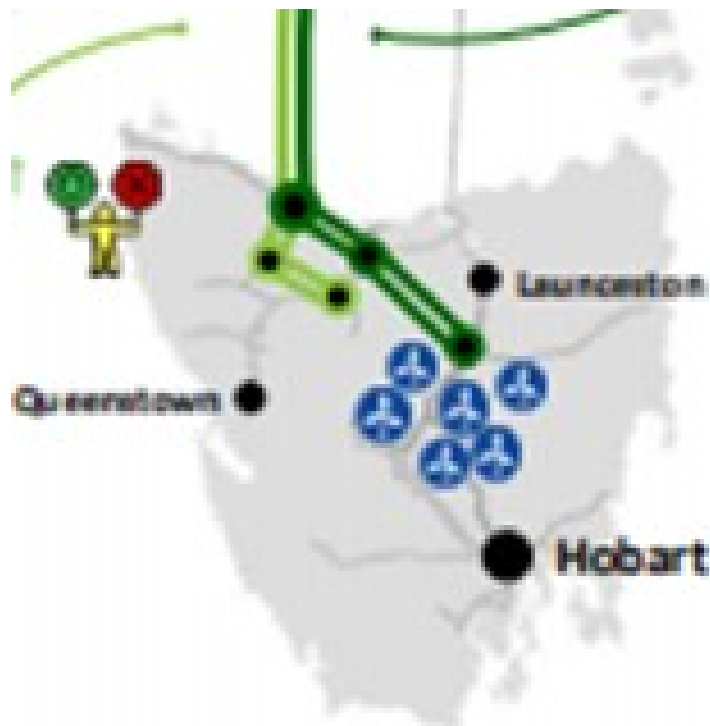
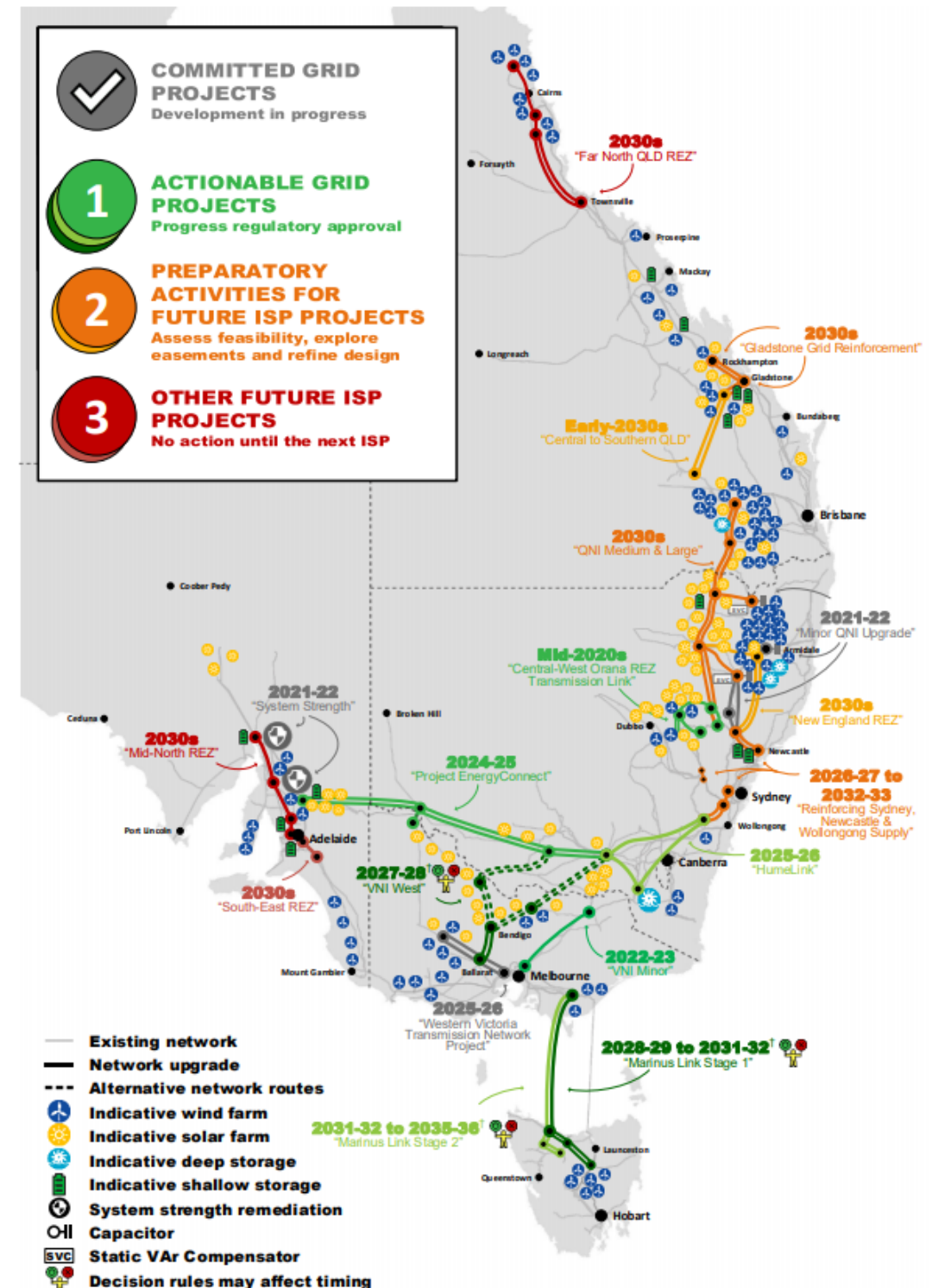


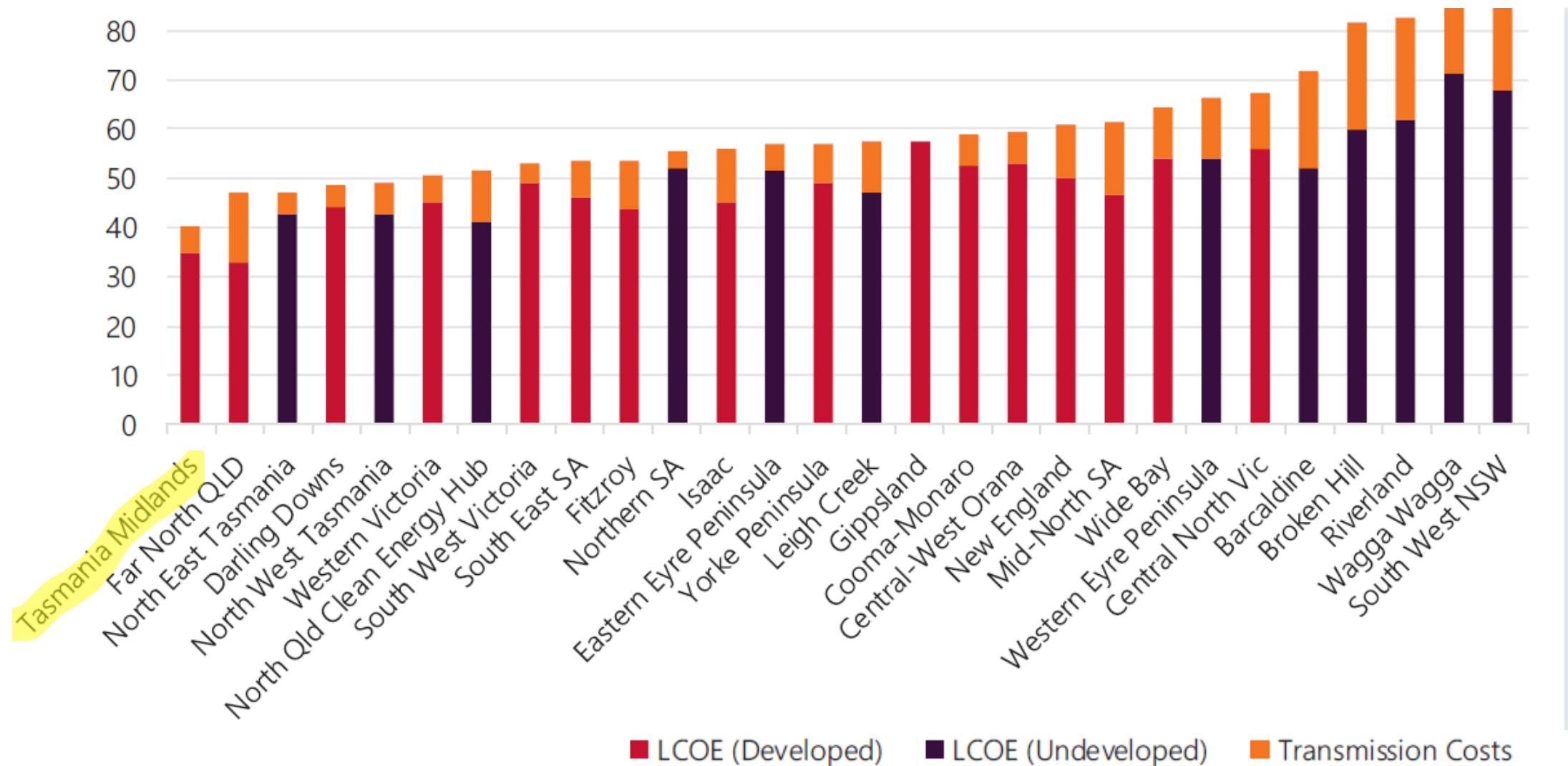
Figure 1 The optimal development path for the NEM



† The timing of these actionable projects is dependent on decision rules. All dates are indicative, and on a financial year basis. For example, 2023-24 represents the financial year ending June 2024.

# Cost of Electricity by REZ across Australia

## AEMO ISP 2020

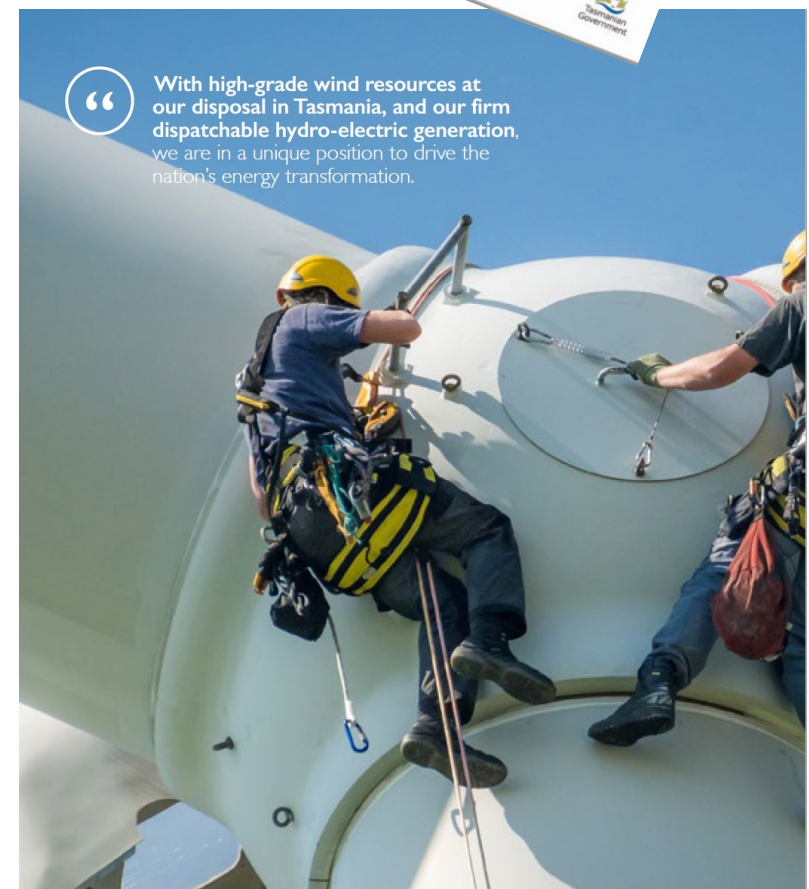




## Tasmania's target

Tasmania has a world leading target of 200% renewable energy by 2040

- ▶ The government has released a draft renewable energy coordination framework that seeks to:
  - ▶ Make Tasmania attractive for industry investment.
  - ▶ Create jobs across the state.
  - ▶ Maximise supply chain benefits from a pipeline of development.
  - ▶ Consider the environment and be sensitive to communities.



“ With high-grade wind resources at our disposal in Tasmania, and our firm dispatchable hydro-electric generation, we are in a unique position to drive the nation's energy transformation. ”

## St Patricks Plains Wind Farm

- ▶ The Central Highlands has a history of generation.
- ▶ The power story of the Central Highlands includes the Great Lake scheme which covers around 12% of Tasmania and has three power stations (generating almost 400MW), five lakes and two lagoons.
- ▶ Waddamana (commissioned 1916) included Shannon and Penstock storages and is now part of a heritage power trail.
- ▶ The recently commissioned Cattle Hill Wind Farm is now part of the power trail.

# Where is the wind farm up to?

We will look at the north east, north west, centre and south of the site.

This project needs consent from council and the Tasmanian EPA.

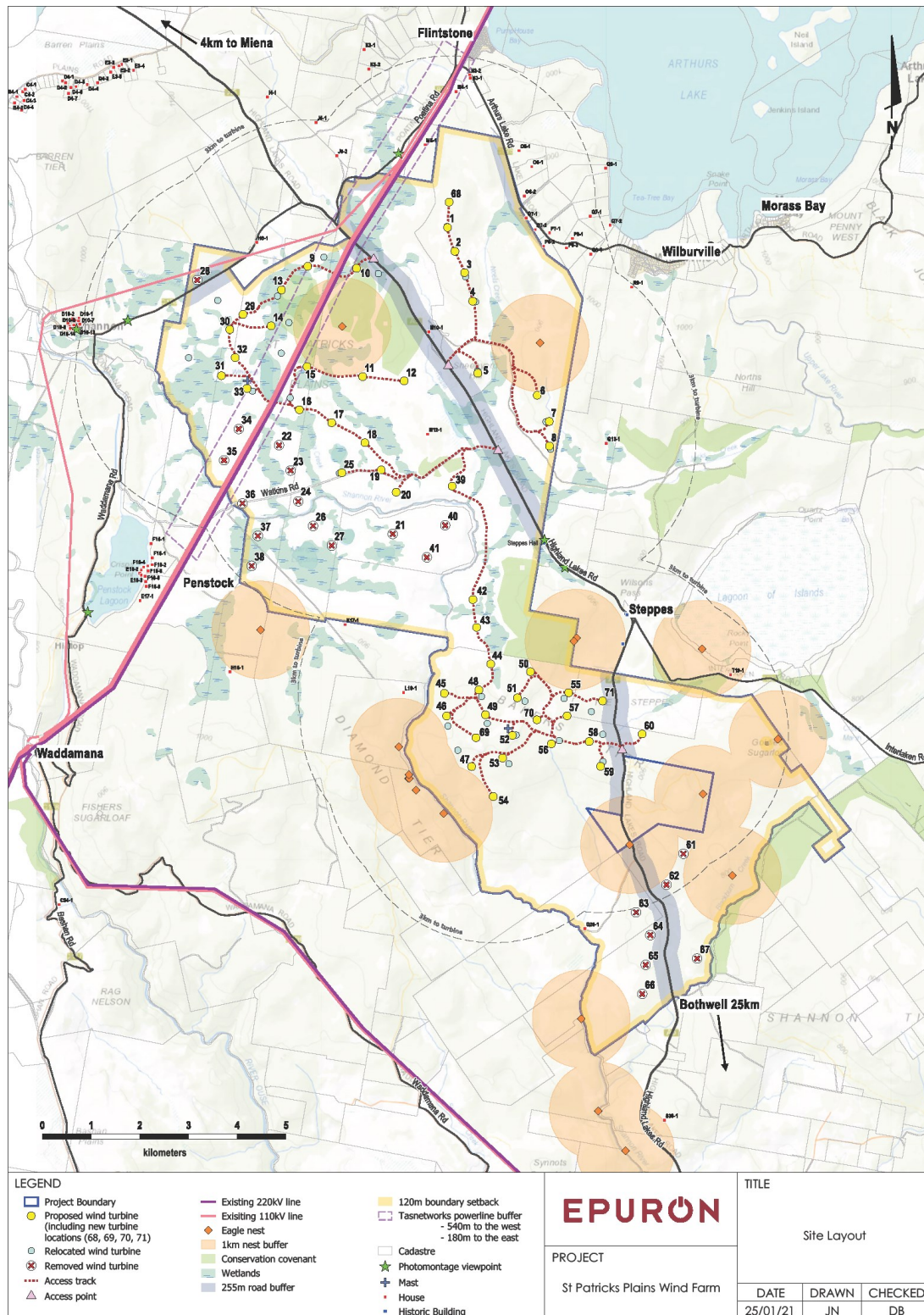
- ▶ Project Specific Guidelines were issued by the EPA in 2019.

They require:

- Eagle surveys (2 years)
  - Noise assessment and prediction
  - Flora and fauna
  - Landscape and visual impact
  - Archaeology and heritage
  - Traffic
  - Social and economic
- ▶ After the first full year of studies the wind turbine layout has been revised.

# St Patricks Plains Wind Farm

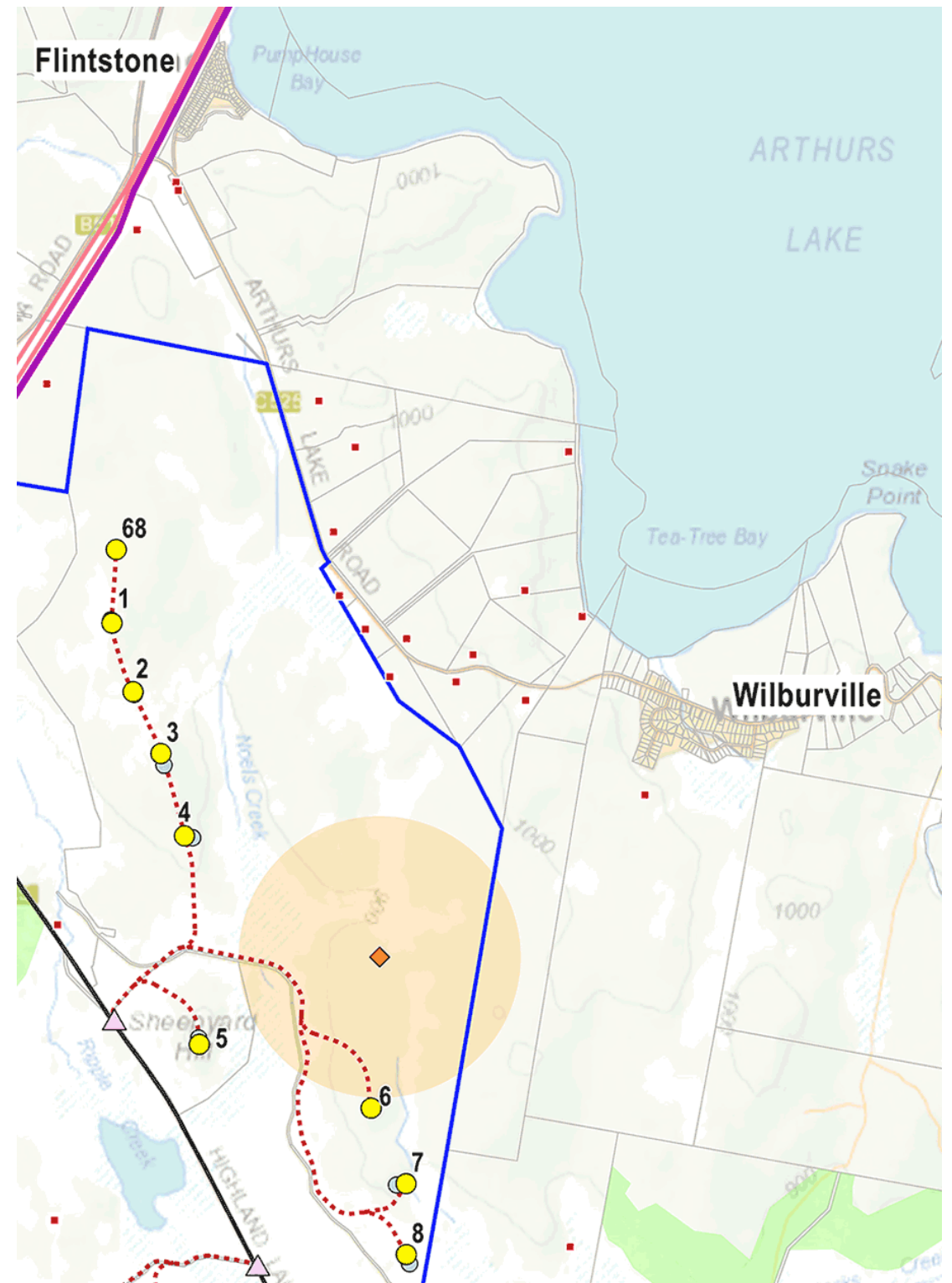
# EPURON



- ▶ Turbine locations reduced from 67 to 50
- ▶ 21 turbine locations removed
- ▶ 4 new locations
- ▶ All turbines at least 3km from Penstock, Shannon, Wilburville and Flintstone
- ▶ Noise compliant at all neighbouring residences
- ▶ Avoids and minimises eagle interactions
- ▶ Avoids and minimises impacts with flora, fauna and habitat
- ▶ Addresses, where possible, concerns raised by the community

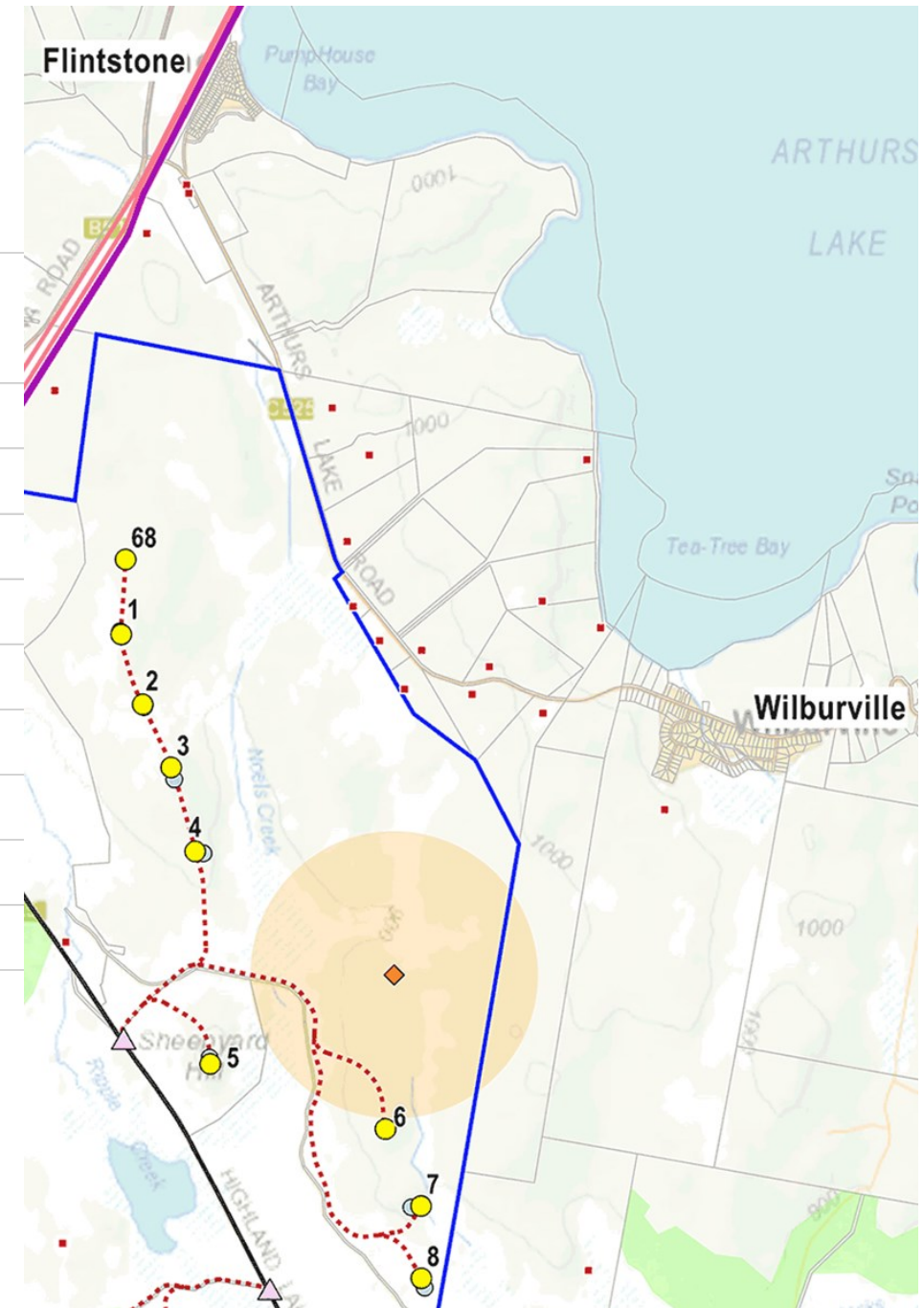
## North East of site

- ▶ 1 turbine (68) added to this area:
- ▶ Elevated ridges with good wind resource
- ▶ New location identified during optimisation
- ▶ At least 3km to a turbine from Flintstone and Wilburville
- ▶ Noise compliant at all residences



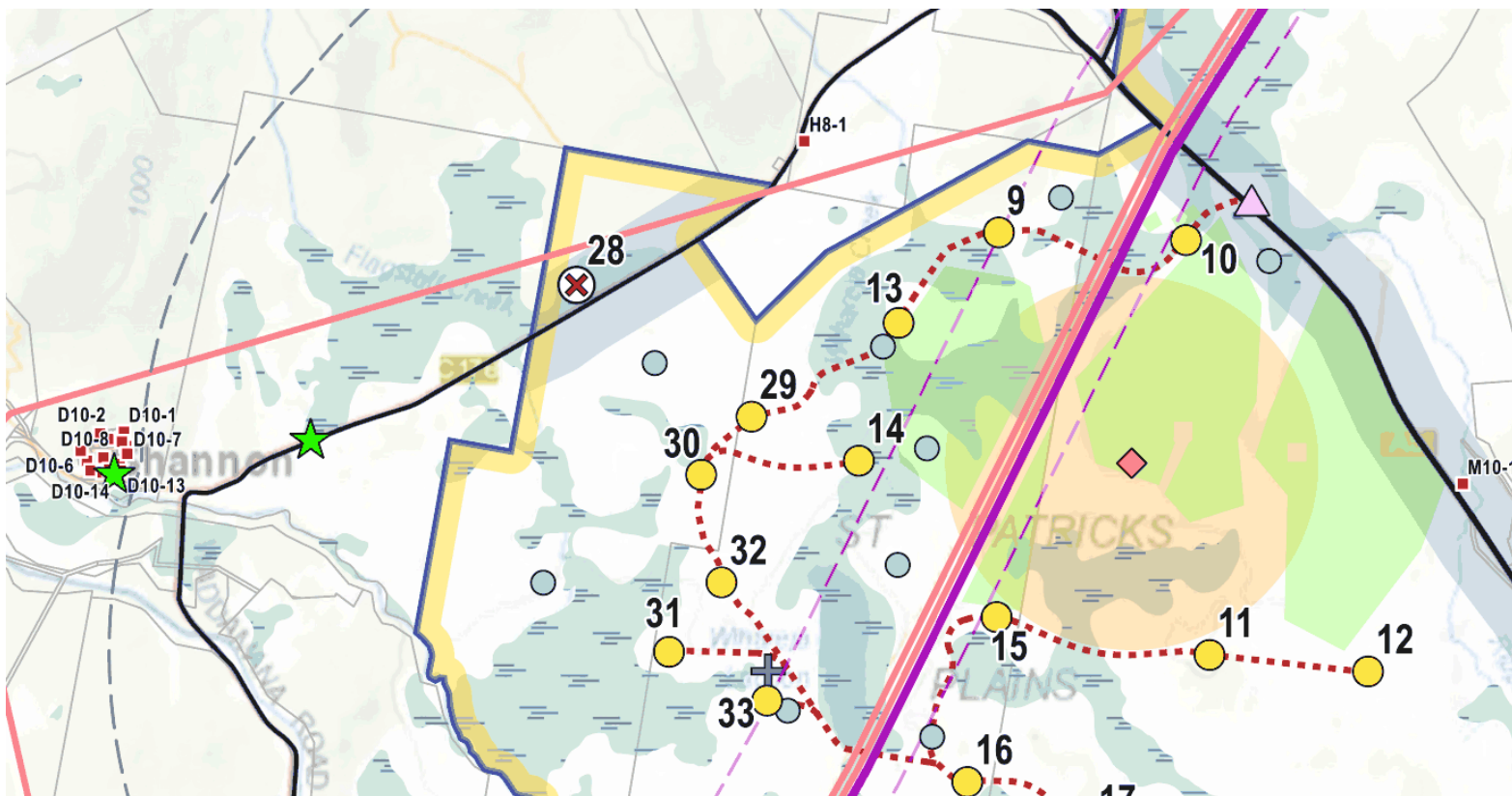
## North East turbines and reasons for movement

Turbine	Status	Dist (m) relocated	Direction moved	Reason for change
68	New	0	0	maximising site potential
1	Relocated	24	SSE	re-optimising for wind
2	Relocated	22	NNW	re-optimising for wind
3	Relocated	86	NNW	re-optimising for wind
4	Relocated	60	WNW	re-optimising for wind
5	Relocated	45	S	optimising reticulation
6	Relocated	16	NE	re-optimising for wind
7	Relocated	68	E	minimising impacts from track
8	Relocated	69	NNW	120m boundary setback



## North West of site

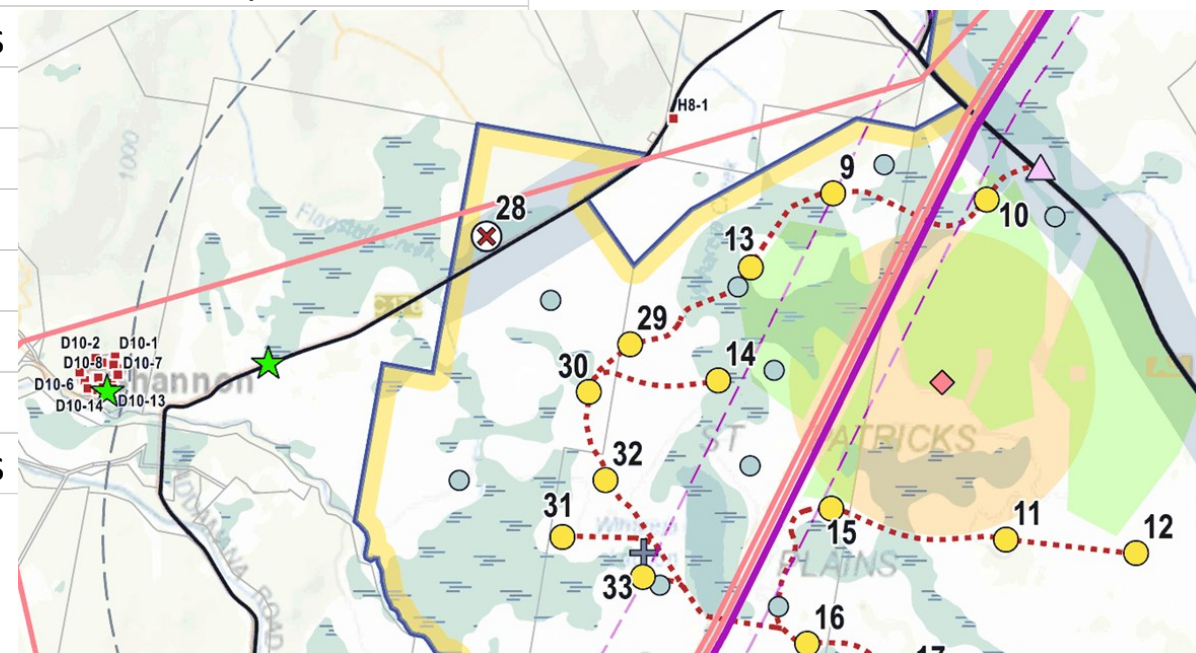
- ▶ Turbine 28 removed
- ▶ Community wanted no turbines north of Waddamana Road
- ▶ 3km from Shannon settlement
- ▶ TasNetworks powerline buffer
- ▶ Consolidation of turbines avoiding wetlands





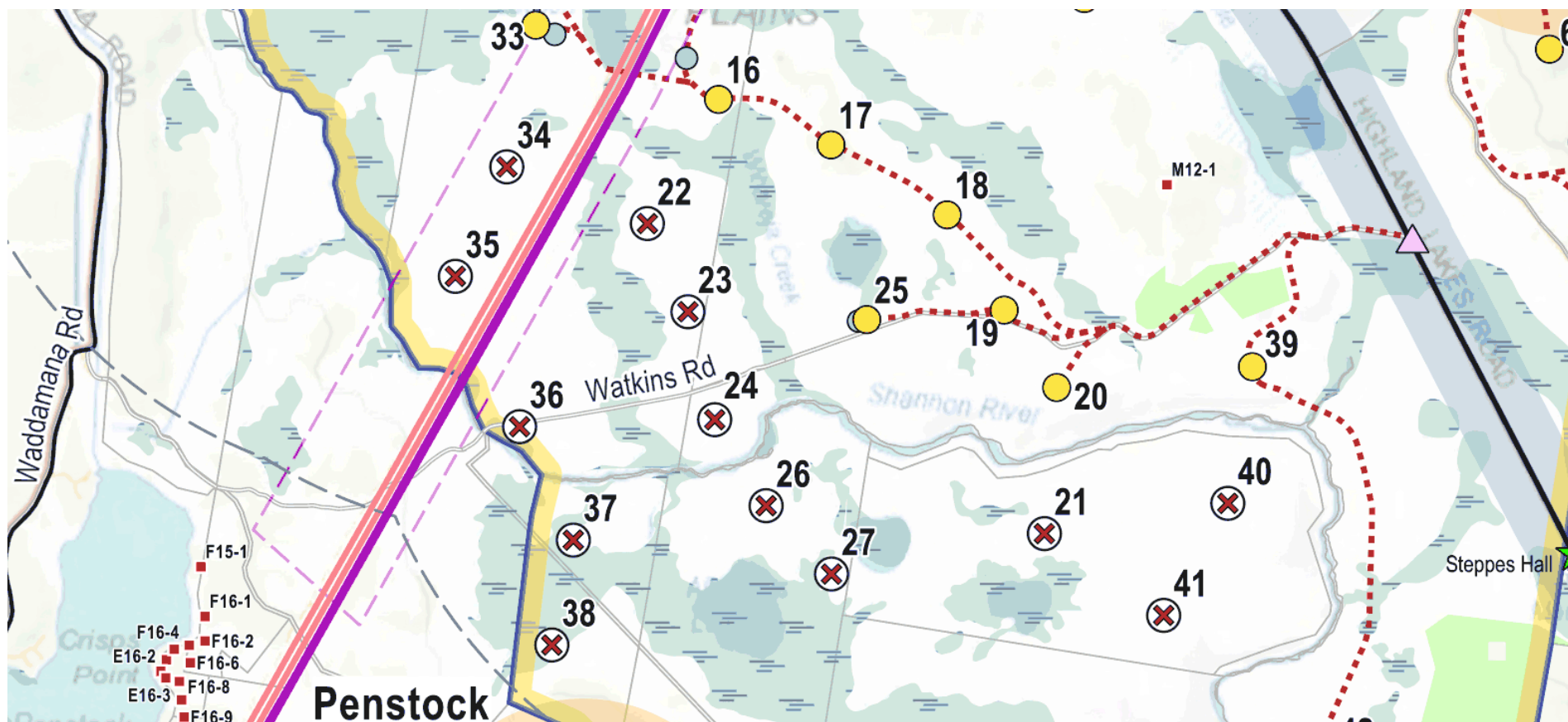
## North West of site

Turbine	Status	Dist (m) relocated	Direction moved	Reason for change
9	Relocated	382	WSW	setback from powerlines
10	Relocated	460	WNW	conservation covenants, community input
11	Unmoved	1		no change
12	Unmoved	0		no change
13	Relocated	152	NNE	avoiding wetland area
14	Relocated	371	W	conservation covenant, setback from powerlines
15	Relocated	599	ESE	setback from powerlines
16	Relocated	306	SE	optimising for wind
28	Removed	0	0	community input
29	Relocated	593	ESE	community input
30	Unmoved	0		community input
31	Relocated	769	ESE	community input
32	Unmoved	0		no change
33	Relocated	124	WNW	setback from powerlines



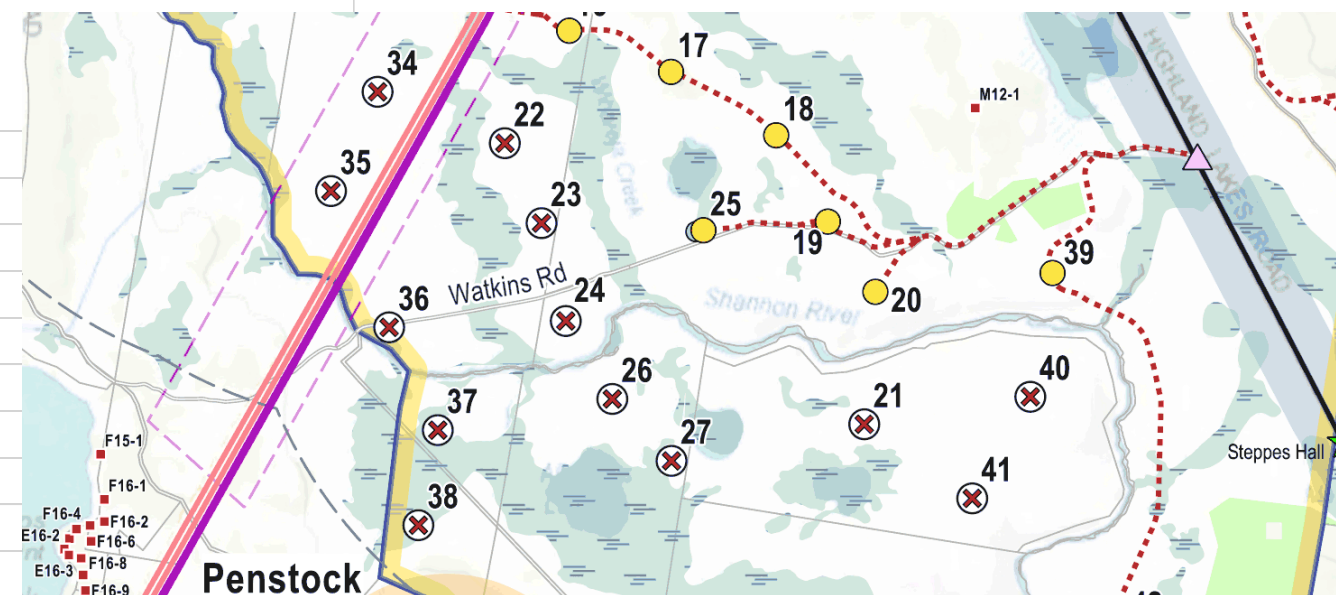
## Centre of site

- ▶ 13 turbines removed
- ▶ Avoidance of eagles
- ▶ Over 3km from Penstock shacks
- ▶ Turbines further from Penstock Lagoon (5.5km from Lily Pond)
- ▶ TasNetworks powerline buffer



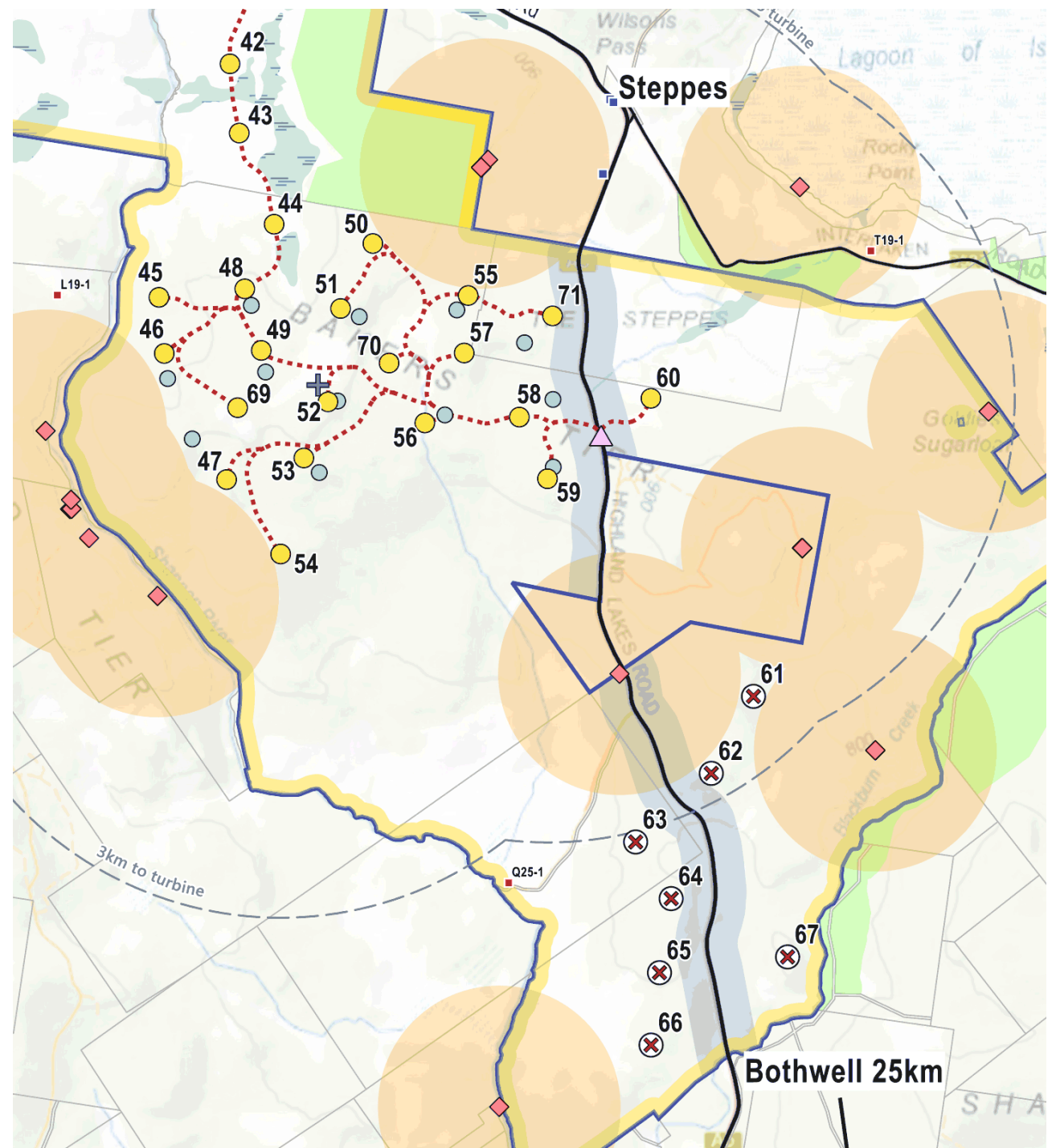
## Central part of site

Turbine	Status	Dist (m) relocated	Direction from previous	Reason for change
17	Unmoved	0		no change
18	Unmoved	0		no change
19	Unmoved	0		no change
20	Unmoved	0		no change
21	Removed			avoiding eagles
22	Removed			avoiding eagles, community input
23	Removed			avoiding eagles, community input
24	Removed			avoiding eagles
25	Relocated	50	E	avoiding wetland
26	Removed			avoiding eagles
27	Removed			avoiding eagles
34	Removed			avoiding eagles, community input, setback from powerlines
35	Removed			avoiding eagles, community input, setback from powerlines
36	Removed			avoiding eagles, community input
37	Removed			avoiding eagles, community input
38	Removed			avoiding eagles, community input
39	Unmoved	0		no change
40	Removed			avoiding eagles
41	Removed			avoiding eagles



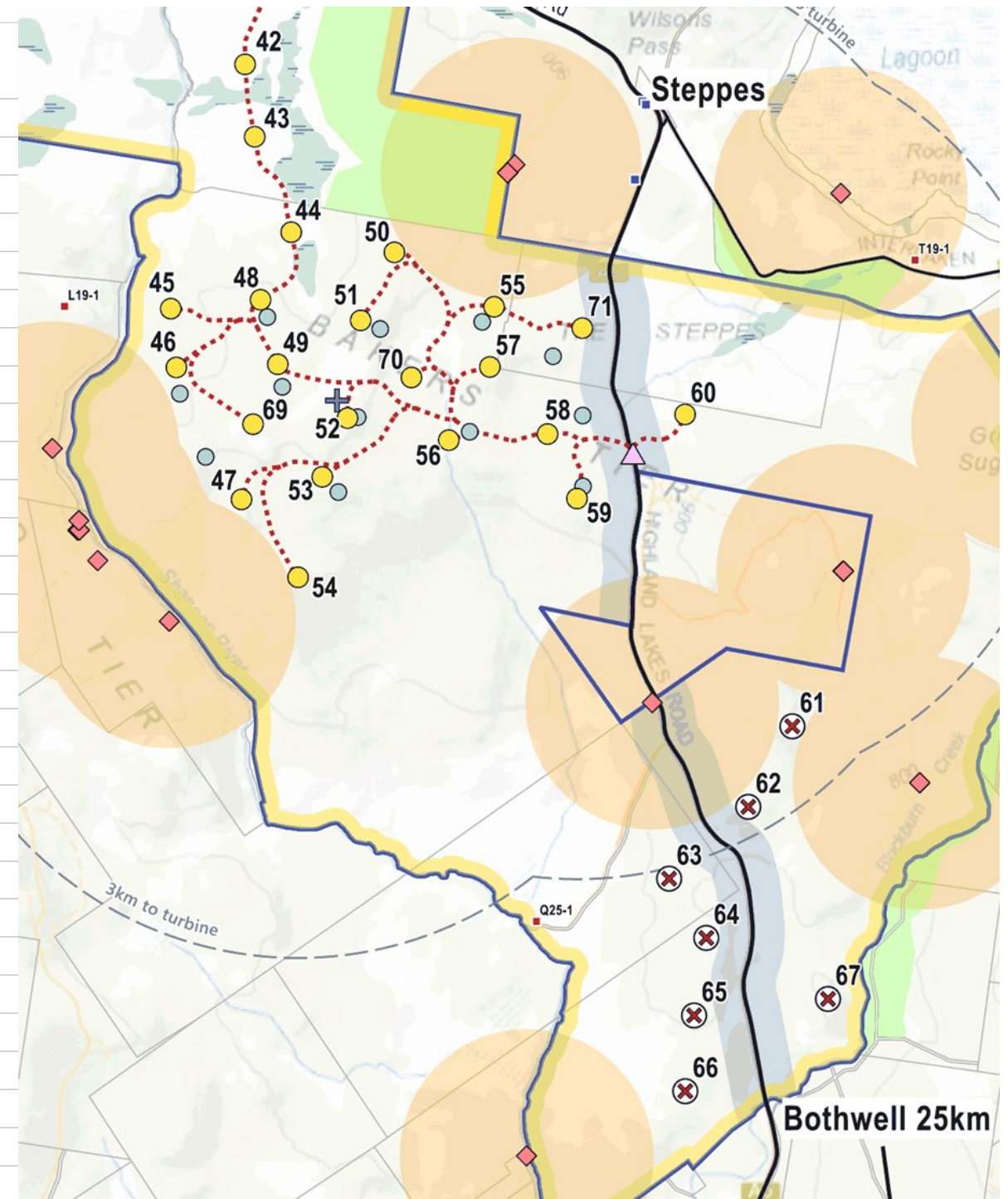
## South of site

- ▶ 7 turbines removed, 3 added
- ▶ Most southerly turbines removed:
  - Avoidance of eagles
  - Less visible from the south
- ▶ Optimisation of turbines in the north of this area
- ▶ 3 new locations in private forestry area



## South of site and reasons for movement

Turbine	Status	Dist (m) relocated	Direction moved	Reason for change
42	Unmoved	0		no change
43	Relocated	1		no change
44	Relocated	4		track realignment
45	Unmoved	1		no change
46	Relocated	209	N	track realignment
47	Relocated	439	SE	track realignment
48	Relocated	146	NNW	track realignment
49	Relocated	182	NNW	track realignment
50	Unmoved	1		no change
51	Relocated	168	WNW	optimising reticulation
52	Relocated	80	W	optimising reticulation
53	Relocated	175	NW	track realignment
54	Relocated	16	S	track realignment
55	Relocated	151	NE	re-optimising for wind
56	Relocated	178	WSW	re-optimising for wind
57	Relocated	505	W	re-optimising for wind
58	Relocated	313	WSW	re-optimising for wind
59	Relocated	107	SSW	minimising cut and fill
60	Relocated	4		re-optimising for wind
61	Removed			avoiding eagles, community input
62	Removed			avoiding eagles, community input
63	Removed			avoiding eagles, community input
64	Removed			avoiding eagles, community input
65	Removed			avoiding eagles, community input
66	Removed			avoiding eagles, community input
67	Removed			stranded turbine, community input
69	New			maximising site potential
70	New			maximising site potential
71	New			maximising site potential



# Community consultation

Principle: Everyone who might have an interest in the wind farm is contacted and provided with information. They have the opportunity to discuss the wind farm with us and we will listen to them and make changes where we can.

## ▶ Concerns we heard:

- ▶ Visual impact – Penstock Lagoon, Highland Lakes Road, changes sense of place.
- ▶ Eagles – and other species
- ▶ Noise
- ▶ Bushfire and ability to fight fires
- ▶ Impacts during construction – traffic, rents etc
- ▶ Wider policy – view that Tasmania does not need more energy

## ▶ Messages of support:

- ▶ Wind is a good form of renewable energy
- ▶ Creates jobs in the area - both construction and operation
- ▶ Tourist attraction and adds to existing power trail
- ▶ Supplements hydro power
- ▶ Reduces coal use via Basslink

# Steppes Information Day, August 2019

- ▶ Approx. 100 people attended.
- ▶ 47 attendees completed a feedback form.
- ▶ Concerns raised included: impacts on wilderness and environment, visual impacts, noise and property values.
- ▶ Positive feedback included: employment, cost effective power and appeal to tourists.

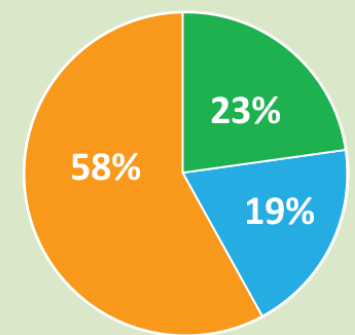


Steppes Hall - Attitude towards St Patricks Plains Wind Farm

**23% Positive:** employment, cost effectiveness, tourist attraction

**19% Neutral:** change to visual sense of place

**58% Negative:** devaluation of property, impact on wilderness & pristine environment, visual impact, noise



■ Positive ■ Neutral ■ Negative

## Bushfest, Bothwell November 2019

- ▶ Approx. 120 people visited the Epuron stall over two days.
- ▶ 70 people signed up to receive newsletters
- ▶ 15 visitors completed a feedback form, most (80%) were supportive of the project.
- ▶ Concerns raised included environment, amenity, noise and visual impacts.
- ▶ Positive feedback included improved electricity supply, support for renewable energy generation and replacement of coal, new infrastructure and jobs.

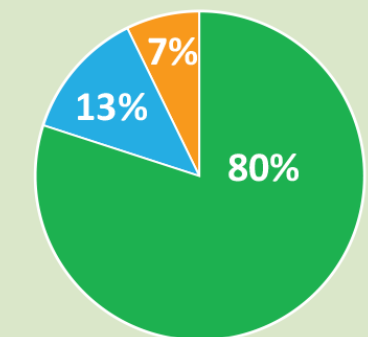


**80% Positive:** wind resource should be used, supplements hydro, replaces coal, improved electricity supply, great infrastructure, jobs

**13% Neutral:** great power source, visual and social downside, concerns about ownership

**7% Negative:** environment, amenity, noise and visual

Bushfest - Attitude towards St Patricks Plains Wind Farm



■ Positive ■ Neutral ■ Negative



## Miena Information Day, February 2020

- ▶ Approximately 80 attended.
- ▶ The team gave a presentation and answered questions, facilitated by PlanCom Consulting.
- ▶ 46 attendees completed a feedback form: half had concerns, half were neutral or positive about the project.
- ▶ Concerns raised included social, visual and audible impacts, disruption to the landscape, conduct of workers, impacts to the flyfishing experience and values of nearby shacks.
- ▶ Positive feedback included support for renewable energy generation, creation of cash flow and jobs in the area.



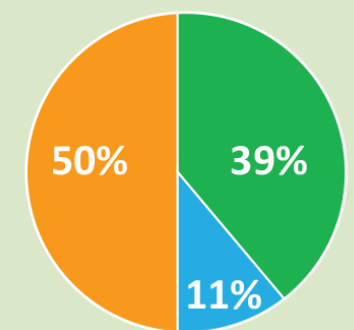
*Martin Poole, Executive Director EPURON  
- consulting with community members.*

**39% Positive:** good energy resource. Creating cash flow & jobs in the area

**11% Neutral:** great power source, visual and social downside, concerns about ownership

**50% Negative:** social, visual & audible impact. Disruption to the landscape & conduct of locally based workers. Impacts to the fly fishing experience and values of nearby shacks

**Miena - Attitude towards St Patricks Plains Wind Farm**



■ Positive ■ Neutral ■ Negative

# Social Impact Assessment (SIA) - draft findings

## SOCIAL IMPACT ASSESSMENT

### pitt&sherry

As required in the Tasmanian EPA's Project Specific Guidelines our consultants Pitt&Sherry have undertaken a Social Impact Assessment which will be part of the EIS documentation. Preliminary findings align with the findings of consultation to date.

#### Activities valued most by the 111 respondents were:

- fishing
- holidaying at their shack
- bush-walking
- hunting
- birdwatching
- camping
- other passive recreation

#### Areas of concern noted were:

- Visual impacts;
- Loss of amenity and changes to the nature of the area

- Impacts on wildlife including wedge-tailed eagle mortality and threatened flora and fauna
- Noise including vibration and infrasound
- Bushfire – ability to fight fires effectively
- Community engagement– more information and consultation wanted
- Impacts during construction such as local workforce accommodation, behaviour and roadkill
- Tasmanians paying for mainland power generation (Battery of the Nation)

## Feedback forms

At each event we ask for community feedback

This helps us to understand the interests and any concerns

What we do with feedback:

- ▶ Identify areas of concern and opportunity
- ▶ Maximise opportunities locally and
- ▶ Where possible address concerns

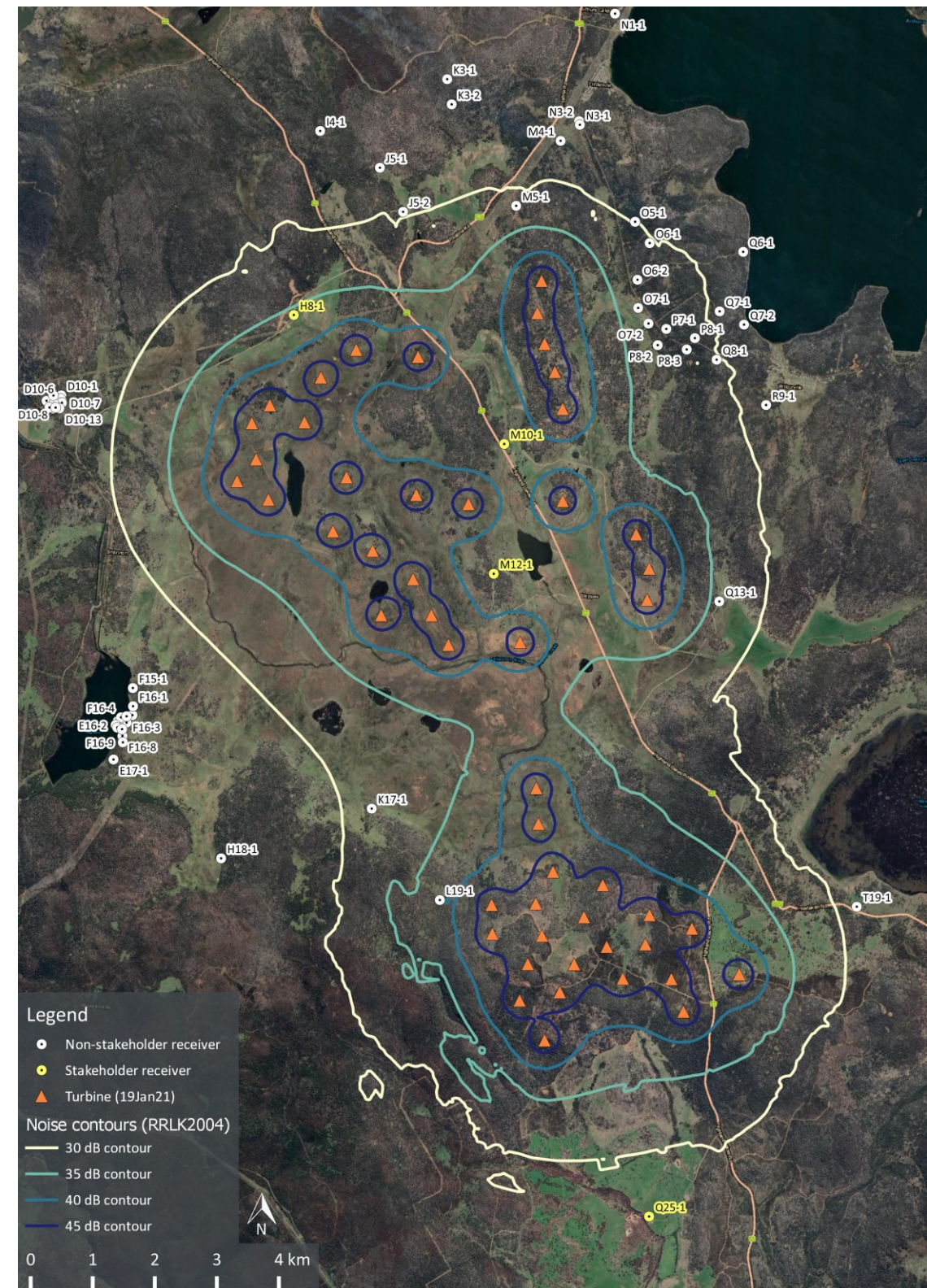
## Visual Impact



- ▶ Views from Highland Lakes Road – most southerly turbines removed minimising viewshed from south.
- ▶ Views from Penstock Lagoon – increased setback, more than 5.5km from Lily Pond at the South and over 3km from the north of the Lagoon.
- ▶ Sense of place – we have contained the wind farm within a smaller viewshed. We acknowledge that turbines are big and there is still visual impact.

## Noise

- ▶ Noise will comply with limits set by the Tasmanian EPA.
- ▶ Marshall Day Acoustics (MDA) will be available at future events – to be arranged.
- ▶ Local residents have requested that we apply a high amenity noise limit. While not applicable under the standard, the wind farm would meet this lower limit.



# Eagles

- ▶ We are completing 8 seasons of eagle utilisation - one year of surveys and data analysis has been completed.
- ▶ The revised site layout avoids and minimises the potential for interactions.
- ▶ We are about to track two eagles using GPS technology.
- ▶ We will review the layout again after two full years of survey and data analysis.
- ▶ We are looking at an automatic turbine control system called IdentiFlight which is being used by Cattle Hill Wind Farm.
- ▶ Measures used in other countries to avoid impacts are being discussed with the EPA.



## Epuron will not build and own the wind farm

- ▶ How we ensure that future owner(s) will carry through on our promises:
  - There will be consent conditions that are legally enforceable
  - Epuron will include in the planning documentation additional commitments that would become conditions of approval including:
    - Community Fund
    - Engaging with the community about accommodation prior to construction
    - Road safety consent conditions eg temporary speed limits
  - Land agreements include obligations relating to:
    - Decommissioning
    - Locations of infrastructure
    - Access points

## Fire

- ▶ Liaising with TasFire and latest layout provided.
- ▶ Turbines are easy to spot and no fly zones would be identified if required.
- ▶ Suitable lakes for fixed wing water access will be considered.
- ▶ Individual areas around the site will be reviewed for fixed wing, helicopter and on ground response.
- ▶ Local firefighters will be consulted in fire management plans.



# Timing & next steps

Timeframe	Item
H2 2019	Notice of Intent lodged Commonwealth EPBC referral lodged First Community Information Day and Bushfest attendance
H1 2020	Second Community Information Day Specialist planning studies ongoing COVID-19 border closures
H2 2020	Most EIS studies complete Layout revised
H1 2021	Third Community Information Day Drafting of Development Application (DA) / Environmental Impact Statement (EIS)
H2 2021	Layout finalised Lodge DA/EIS and fourth community consultation Submit grid connection application
2022	Subject to approval: DA, EPBC & grid finalised; ready for construction

 **We are here**

Quarterly newsletters; Community Information Days, 1 on 1 meetings, community meetings



# Opportunities for Tasmanians

It is highly likely that St Patricks Plains Wind Farm would engage local companies and services during construction of the wind farm – because it makes sense.

**Workshop** - There would be a Local Business Workshop to gather information about services and capability in the local community and maximise opportunities for local suppliers.

**Expressions of Interest** - we are already being contacted by individuals and companies interested in working on and supplying services to the wind farm. We are gathering this information in a supplier database

**Briefing** - Post approval there would be a briefing held locally to talk through the work and services required.

**Paperwork** - to work for big contractors you need to have insurances, qualifications, certificates, licences etc as required.

## Local benefits

Alongside construction spending in the area and 12-15 long-term jobs there would be a **Community Fund** into which Epuron commits \$3,000 annually per wind turbine installed.

If 50 wind turbines are built the fund would receive  $50 \times \$3,000 = \$150,000$  each year

Community suggestions for the fund include:

- ▶ Council provision of health services
- ▶ Purchase of local fire truck
- ▶ Improved communications in the area
- ▶ New facilities for anglers
- ▶ Support for heritage places and projects
- ▶ Education scholarships
- ▶ Environmental projects
- ▶ Benefits for local sporting or recreation clubs

## What next?

- ▶ We are moving through the planning process and will have another information day when the EIS is lodged.
- ▶ Please contact us – we are keen to talk to individuals about how we can maximise the benefits and further address concerns about the wind farm.
- ▶ Thank you

**EPURON**

## **Epuron**

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**AUSTRALIA**

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