



MINUTES

Environmental Advisory Committee

held at

Hartley Building
Meeting Room
184 Mort Street, Lithgow

on

Wednesday 11 November 2020

at 4:00 PM

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The Chairperson declared the meeting open at 04:00 pm.

1. Present

Present: Councillor Steve Ring, Councillor Coleman, Julie Favell, Trish Kidd, Sue Graves

Officers: Richard Holz, Andrew Muir, Steven Fleishman, Fiona Dick (minute taker)

2. Apologies

Apologies: Damien Roebuck.

3. Confirmation of Minutes

The minutes of the 12 August meeting were not resolved at a council meeting. They will be presented to the Ordinary Meeting of Council 23 November 2020.

ACTION

THAT the Minutes of the meeting of be taken as read and confirmed and noted that they will be presented to Council meeting 23 November 2020.

MOVED: Councillor S Ring

SECONDED: Sue Graves

4. Declaration of Interest

5. Agenda Items

5.1. Items Requested by Councillor Ring

a) Waste management – Hassans Walls, Capertee Park, Glen Davis – transfer station, risk of illegal dumping due to changes in Blue Mountain Councils charges and operating time for its waste facilities.

- Transfer station at Glen Davis Council has received funding for rehabilitation.
 - Potential for more rubbish being dumped in our area.
 - Capertee, Wallerawang and Portland to be supervised with cameras and Council is looking for a way to deal with this.
 - Illegal dumping on private land and at Council's rural landfills. Council is looking at options for the rural landfills.
 - Council has received funding from the EPA.
 - Grants officers were discussed.
 - Staff in each Department look for their own grants.
-

b) Hassans Walls – rubbish/littering at lookout, division of road for pedestrian/cyclist, dangerous & illegal jumps constructed on the reserve.

- Road costing for trail still being sought.
- It will be a trial basis for 6 months and then making it permanent so you can walk up Hassans Walls safely.
- Illegal bike tracks which are damaging Hassans Walls Reserve – update requested. Richard Holz to check DA.
- Trish Kidd advised that the LCC-approved downhill bike track as part of the DA Consent Conditions ordered to close previous illegally constructed tracks. No-one from Council is monitoring this. To date the DA proponent has not complied
- No update received from Rangers.
- Rubbish discussion has been sent to EPA for illegal dumping. If necessary cameras will be installed.
- Counsellor Ring advised Council was planning to establish a “one-way-only” vehicle access through-road for the entire of Hassans Walls Reserve. This was planned to be a six-month trial in order to accommodate pedestrians and bike riders. It is proposed to be a trial for 6 months and then making it permanent so you can walk up Hassans Walls safely. Trish Kidd queried whether this trial was permissible under the Hassans Walls Plan of Management (PoM). Trish Kidd queried whether Hassans Walls Road within the reserve is designated as a road reserve, a tourist route, is part of the reserve or other, and requires clarification as to its official designation. Trish Kidd queried what community consultation process would be undertaken in regard to any proposed changes to current vehicle access.
- Trish Kidd advised tracks in Central West Mountain Bikes were supposed to be revitalised tracks.
- Oneway road is it permissible?
- Community consultation?

c) Tree plan for Lithgow – is there still a subcommittee – if not do we withdraw this item.

- Tree Plan Subcommittee was discussed
- Planned for a Committee but not established.
- Renewal of trees.

d) Koala Habitation Protection SEPP – impact on LGA.

- Impact on LGA
- What changes have been implemented
- Koala plans have been done by Council.
- What is the most likely places Koalas have been sighted.
- Community sighting program was suggested.
- Report for the next meeting. Sherilyn Hanrahan to advise.

e) Revegetation of bushfires affected areas around Lithgow specifically Bald Hill. Re: public submission from Gaye Mason to Council meeting on 26th October 2020

- Revegetation of Bushfire areas
- Owners of property owned by Prime and Lithgow City Council. Stabilisation study was completed earlier 2020. Prime have indicated they will not spend any money on this.
- Council did stabilisation of the slopes around Lithgow which is critical. Wolgan Valley has been stabilised with the boulders.

- Bushfire so severe re-growth is very slow and Lithgow could have serious erosion
- There is native vegetation with a high fire resistance.
- Trish Kidd gave an outline on the nature of Fire regeneration.
- All regeneration went down Cox River with flood/rain in February.
- Fire resistant retardant plants.
- Can any advice be given to the community regarding planting regenerative plants?
- Council is looking at preparing a proposal to seek funding to purchase bushfire hardy plants
- Discussion with BF Recovery Officer.
- Maps will be sent to the Committee
- Lithgow, Oberon Landcare will be speaking to Prime
- Purple Copper Winged Butterfly only eats native blackthorn leaves.

Attachments

Farmers Creek Community Frog Monitoring – Draft Proposal

Recommendation

The information be noted.

5.2. Items requested by Julie Favell

Summary

- a) Please provide an update on funding for Hassans Walls Reserve Flora & Fauna assessment, noting in previous minutes \$40,000 still available. Usage either to attract further funding or could this be used for the assessment with LCC adding the remaining \$20,000. Also there are ongoing issues with clearing without reviewing areas known to have possible listed species.
 - As discussed earlier - \$40,000.00 only available for Farmers Creek Masterplan.
- b) Centennial Coal modification to Angus Place/Springvale water transfer pipeline to MPPS.
 - Proposing a second pipeline to run to Mt Piper Power Station for water transfer.
- c) Please provide an update on Solar panels/battery LCC administration building
 - Solar panels on the main Council building will be functional as of Monday 2 November 2020. There was a planned shutdown on the Saturday before to switch over to the new system.
 - The system is a 72kw system and the administration building will predominantly run off this down during the day and charge the battery backup system.
 - Aquatic centre a complete revised scope of work was required and has been provided to Council with the project start date is looking like early December 2020.
 - Committee would like to know how much we will save on electricity bills?
 - Can savings be put into other solar projects?
 - Can Council sell the power back to the grid?
 - Councillor Coleman would like a presentation. David Anderson and Sean Quick to advise.

Attachments

1. Correspondence from Andrew Blakers dated 10 November 2020
 2. Correspondence from Centennial Coal Company Limited dated 30 October 2020
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Recommendation

That a presentation from Council staff on savings provided by the solar project on the Administration Centre be requested for a future meeting.

5.3. Items requested by Trish Kidd

Commentary

- a) Proposal for support to Farmers Creek Community Frog Monitoring Program (in partnership with LCC, Office of Environment & Heritage/Save our Species Program and The Australian Museum)
- tabled the Proposal
 - LOLA is seeking support from the Committee of the current Program (that specifically aligns with the Farmers creek Masterplan), to make Council aware of it and have the current ongoing program endorsed.
 - The Committee supported the proposal
- b) Please provide an update on the status of LCC Bushland Management Officer
- Attending Council staff representative Andrew Muir advised that Council staff had determined that "while there are no doubts as to the benefits of such a role, there will not be a Bushland Management Officer appointed, at least in the medium term. Significant financial constraints are the main reason for postponing consideration of the role."
 - Staff advised that this will only happen if externally funded, Council's current financial situation will not currently allow it
 - Despite working on this proposal together for many years the Committee was disappointed with Council's decision, particularly thinking that this last year had been very close to having the financial allocation internally approved
 - If the EAC did support any grant funding opportunities can Council confirm what the costs would be?
- c) Please provide advice on the planned delivery priorities for Farmers Creek Masterplan 2020/21 (incl. 1M for LCC)
- A WP has been created to determine how to effectively deliver this funding that incorporates key stakeholders
 - Can the Committee have input into the strategic delivery of this spending?
 - Matt Johnson to advise.

Attachments

1. Farmers Creek Community Frog Monitoring Proposal

Recommendation

- The information be noted.

6. General Business

a) Julie Favell to provide update on Destination Pagoda Economic Business Plan. Welcoming the Lithgow Transition Working Party Final draft for "Case for Economic Change" page 60 Dot point 5 mentions to make it a reality. Gardens of Stone Alliance DP October 2020 walking tour events and information days Gang Gang Gallery, successful.

- Aligns with TWG Report
- New document revised from initial one presented a couple of years ago.
- Lithgow City Council supports in principal
- Resources are there.
- Encouraging people to have a look.
- Julie tabled document from Lithgow Community Energy on potential for renewable energy.

b) Julie Favell to provide update on Energy Recovery Project – The Energy Australia Energy Recovery Program is in assessment mode waiting on EPA second round of responses. Energy Australia have advised they will use best practice following European Standards however there are no existing acts that cover that level.

- Lithgow Environment Group does not support and opposes the Energy Australia Energy Recovery Program.
- Energy Australia has to answer to EPA.
- Julie outlined the issues the Environment Group have with the Recovery Project.
- Committee members may wish to go on a tour of the site in 2021.

Recommendation

The information be noted.

7. Meeting Close

Meeting closed at 5.45pm.

Next Meeting: The next scheduled meeting of the Environmental Advisory Committee is Wednesday 10th February 2021 in the Hartley Meeting Room.



Australian
National
University

Andrew Blakers
Professor

Research School of Electrical,
Energy and Materials Engineering
Engineering Building, 32 North Road
ACTON, ACT, 2601
+61 (02) 6125 5905
andrew.blakers@anu.edu.au
<http://re100.eng.anu.edu.au>
<https://eng.anu.edu.au/>

10th November 2020

TO WHOM IT MAY CONCERN

This short report describes a possible Calare Renewable Energy Zone

Andrew Blakers

Regards,

Andrew Blakers

Calare Renewable Energy Zone

Prepared for the Lithgow Community Power Project Inc

The Lithgow-Bathurst-Orange district is highly suitable to be designated a **Renewable Energy Zone (REZ)**:

1. Close proximity to Sydney (100 km)
2. Very good solar resources (Figure 1)
3. Excellent wind resources (Figure 2)
4. Excellent pumped hydro energy storage opportunities (Figure 3)
5. Excellent existing transmission connections to Sydney (Figure 4)
6. Most of the electorate of Calare (figure 5) has excellent prospects to participate in the renewable energy industry.

The Lithgow-Bathurst-Orange district (and the electorate of Calare) is one of the most prospective Renewable Energy Zones in Australia.

Power from wind and solar farms in the Lithgow-Bathurst-Orange district can travel directly east to Sydney using existing high-power transmission lines or can be transferred by an existing high-power transmission line to Goulburn and thence to Sydney.

Large-scale private investment in a Calare REZ could result in 10-30 Gigawatts of wind and solar PV (and transmission and storage) over the next 10-20 years. This investment would amount to \$15-50 billion. A significant fraction of this investment would be spent in the district to build and operate and (periodically) refurbish solar farms, wind farms, roof-mounted solar PV systems, new power transmission, pumped hydro energy storage and battery storage.

Such large-scale investment is a **MAJOR** economic opportunity for the district.

For context, Australia is currently installing 6-7 Gigawatts of solar and wind per year with a value of about \$8 billion per year.

Local jobs would be created in approvals, road construction, transport, land preparation, earth moving, solar panel mounting, turbine erection, electrical connections, project management, operations & maintenance and many others.

The renewable energy industry is installing net new generation capacity globally (mostly wind and solar PV) at a rate that is 5 times faster than the fossil and nuclear industries combined. In Australia, nearly all new generation capacity is wind and solar PV, because it is cheaper than new coal, gas or nuclear. Australia is installing 250 Watts per person per year of new solar and wind power, which is 4 times faster than the EU, Japan, China or the USA:

<https://www.dropbox.com/s/hdgwfhzd5mbzs14/Australia%20RE%20pathfinder.pdf?dl=0>

However, lack of new transmission threatens to throttle this industry. The eastern part of Calare near Lithgow is close to Sydney and has excellent existing connections.

Calare is already participating in the renewable energy industry via solar and wind farms. However, there is far larger opportunity in future years if Governments provide assistance.

What has to happen to unlock this opportunity?

1. The NSW and Federal Governments could designate Calare/Lithgow as a renewable energy zone
2. The Federal and State Governments could facilitate construction of additional transmission to allow movement of solar and wind power from Calare/Lithgow into Sydney and thereby unlock private investment into Gigawatts of new solar and wind farms
3. Federal and State members of Parliament, and local Councils, could endorse and support a Calare/Lithgow REZ
4. A detailed study of the enormous potential for jobs and investment could be commissioned

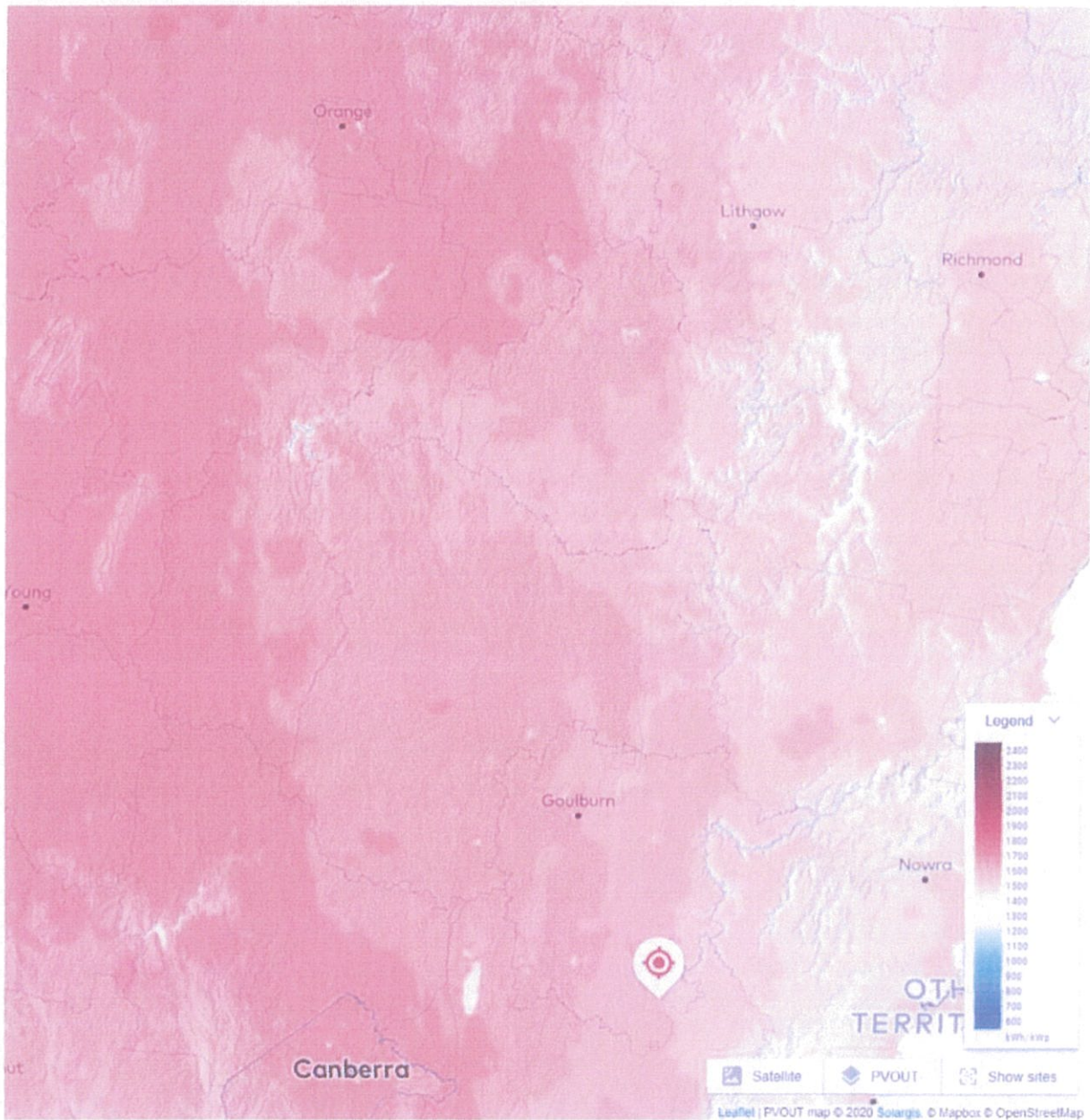


Figure 1: Solar resources are very good. Source: <http://globalsolaratlas.info/>

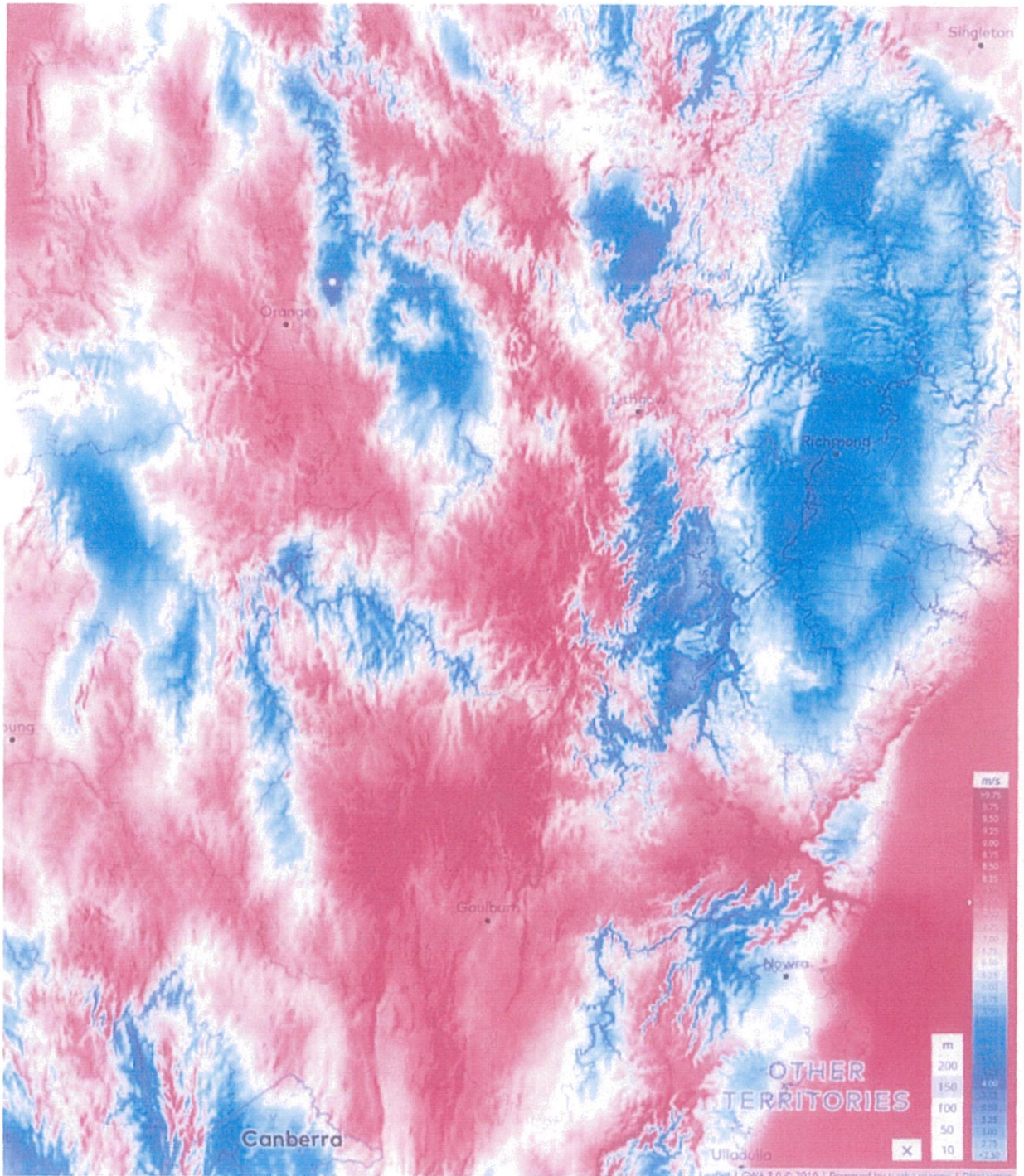


Figure 2: Wind resources are excellent. Source: <https://globalwindatlas.info/>

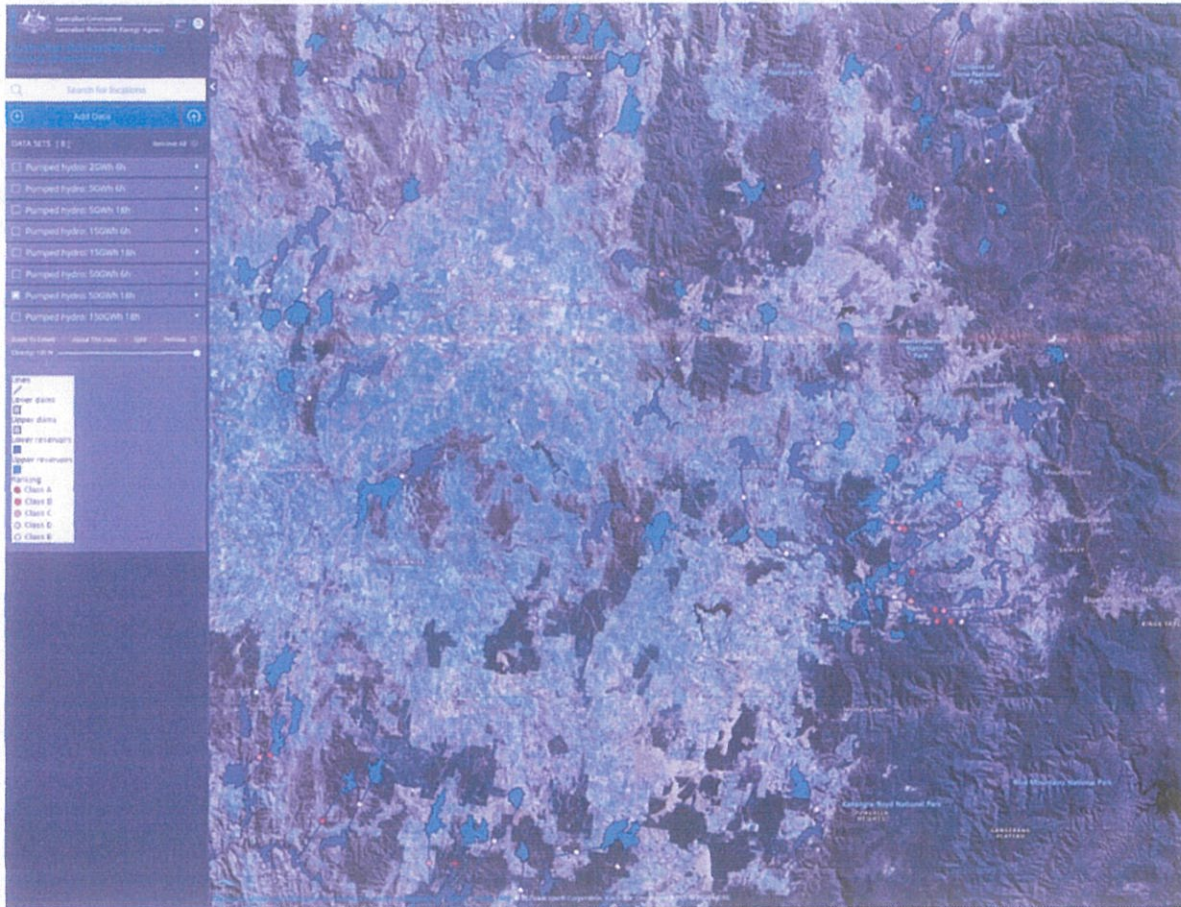


Figure 3: Excellent pumped hydro energy storage opportunities are plentiful. Source: <https://nationalmap.gov.au/renewables/#share=s-A9xabtQi0S1tV6dh>



Figure 4: High voltage power transmission. Source:
<https://nationalmap.gov.au/renewables/#share=s-wuO4GSzivU1OQX6d>

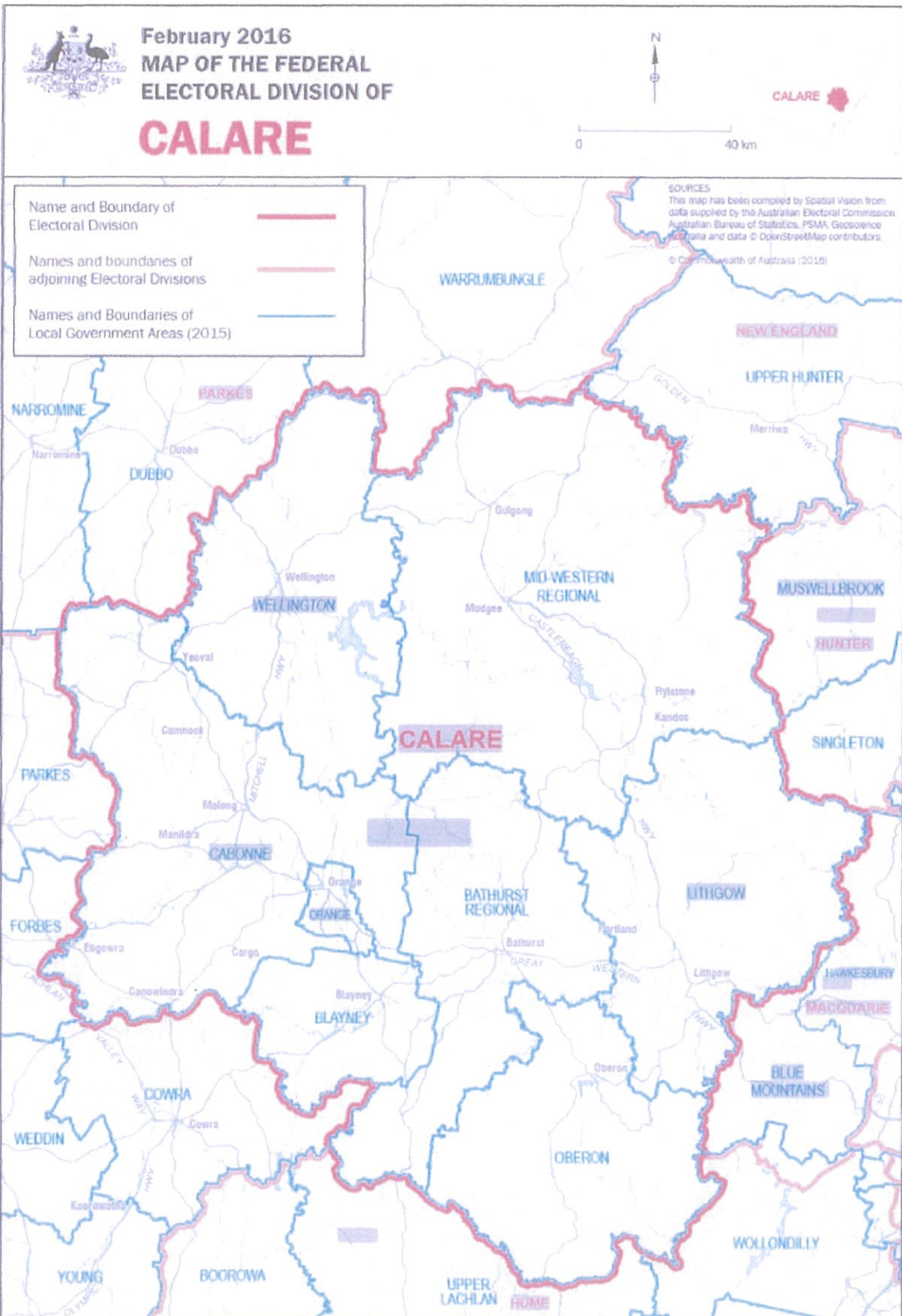


Figure 5: Electorate of Calare. <https://www.aec.gov.au/profiles/nsw/files/2016/2016-aec-nsw-a4-map-calare.pdf>

30 October 2020

Brendan Blakeley
Chair
EnergyAustralia's Community Consultative Committee

Dear Brendan

Re: Angus Place and Springvale Water Treatment Plan Modifications

Overview

Angus Place Colliery is seeking a modification to its development consent to enable the construction and operation of a new water transfer system. The new water transfer system requires the construction of a new pipeline allowing for water discharged from Angus Place to be independently transferred to the Mt Piper Power Station (MPPS) for treatment.

The proposed new water transfer system pipeline will generally follow the existing pipeline route and falls largely within existing easements that have been disturbed as a result of prior approved construction activities.

The proposed works are required because water discharged from Angus Place falls outside of the specifications required for the Springvale Water Treatment Project (Springvale WTP) for use at the Mount Piper Power Station (MPPS).

The water can be effectively treated if it is not blended with water discharged from Springvale Mine but is transferred via a dedicated pipeline directly to the Brine Concentrators at the Springvale WTP and integration with the MPPS cooling water management system.

Project Specific Details

The Springvale Water Treatment Project (WTP) involves the transfer of water from mine dewatering facilities servicing Springvale Mine and Angus Place Mine, to a water treatment facility (Springvale water treatment facility) located at the Mount Piper Power Station (MPPS). Treated water is used for industrial reuse to meet the demand for make-up water requirements within the MPPS cooling water system. Any excess treated water is temporarily stored within Thompsons Creek Reservoir for subsequent reuse during periods of high water demand in the MPPS cooling water management system.

The Springvale water treatment facility has been specifically designed to treat a specification of incoming mine water based upon a historical mix of mine water quality originating from both Springvale and Angus Place mines. If the incoming mine water falls outside of the design specification of the Springvale water treatment facility, the Springvale water treatment facility may be required to operate with a reduced flow condition. The reduced flow condition can potentially restrict the capacity to transfer water from the mines underground storages, potentially leading to the flooding of mine and sterilisation of coal reserves. There have been regular instances where the Springvale water treatment facility has been required to operate with a reduced flow condition.

A significant contributor to the Springvale water treatment facility operating with a reduced flow condition is the elevated hardness in the Angus Place 800 panel area which is primarily caused by the unique geological conditions encountered in the area.

Centennial Coal Company Limited
ABN 30 003 714 538

Level 18, 1 Market Street
Sydney NSW 2000 Australia
T +61 02 9266 2700
E info@centennialcoal.com.au
www.centennialcoal.com.au

APP241769



There is limited capacity to blend the mine water from Springvale and Angus Place mines in order to meet the incoming mine water design specifications for the Springvale water treatment facility. The dewatering rates from Angus Place Mine required to achieve a suitable water quality are considered too low to maintain adequate dewatering of the mine and dilution is not a sustainable option in the medium to long term.

Proposed Modification

Due to the factors outlined above, an alternative water management strategy is proposed to address incoming mine water quality requirements for the Springvale water treatment facility. The strategy will maintain the overall objective of the Springvale WTP to achieve industrial reuse of mine water in the MPPS operations and achieve improved environmental outcomes for the Coxs River catchment. The alternative water management strategy includes the following components:

- A new Angus Place water transfer system to allow mine water to be transferred from Angus Place Mine directly to MPPS independently from the Springvale WTP Raw Water transfer pipeline.
- Establishment of a water softening plant at Angus Place pit top to treat mine water for elevated hardness, potentially increasing the proportion of flow able to be transferred directly to the Springvale water treatment facility.
- Treatment and reuse of water within the existing MPPS cooling water management system.

A modification to both the Angus Place Mine and Springvale WTP development consents is required to procure consent for the implementation of the alternative water management strategy. A Modification Report is currently being prepared for submission to the Department of Planning, Industry and Environment to support the modification application.

Centennial will keep you informed on the progress of the modification and associated works however, in the meantime, if you have any questions, please contact me by phone (0423 605 324) or email (james.marshall@centennialcoal.com.au).

Yours sincerely



per **James Marshall**
Group Manager Stakeholder Engagement

Farmers Creek Community Frog Monitoring

Draft Proposal

BACKGROUND

Frogs are useful indicators of ecosystem health, particularly for recognising changes in the condition and function of riparian areas. Monitoring ecological condition is essential to understanding if and why change is occurring - whether beneficial or adverse - and for informing the management of ecosystems. Monitoring has the added benefit of promoting community engagement through education; by instilling confidence that on-ground efforts and investment are working; and by affording opportunities for community participation in the monitoring itself and in restoration efforts.

Recognising ecological change requires reliable ecological data. This demands consistent and repeated data collection over time to help identify trends in condition and the potential factors contributing to change. Frequent repeated data collection can be cost-prohibitive; however, active and meaningful volunteer participation provides obvious cost and time efficiencies which can make ecological monitoring cost-effective.

An opportunity exists to initiate a community frog monitoring program in Lithgow. A Masterplan for the improvement and rehabilitation of the Farmers Creek catchment was prepared for Lithgow City Council in 2017 (Gondwana Consulting 2017). The Masterplan provides baseline riparian condition data and staged planning for civic and environmental development. Further, a new community group has begun implementing on-ground riparian management actions on Farmers Creek. There is therefore an opportunity to measure the response of the riparian environment to current and future works. Systematic monitoring of frogs can inform the progress of the Masterplan and can complement it by promoting interest in riparian values.

There are numerous advantages to targeting frogs. There are only between 10 to 15 species of frog likely to occur in the Lithgow area, and each frog has a distinctive call, making identification rapid, non-invasive and requiring minimal physical exertion on the part of an observer. Moreover, in 2017 the Australian Museum released FrogID, a free smart device application that facilitates the recording, collection and identification of frog calls.

By engaging the local community and providing them with the initial requisite knowledge and support, it is hoped that the local community will recognise the value of this monitoring program to their own benefit, the benefit of decision makers in Lithgow City Council, and the benefit to science of a cost-effective and sustainable ecological monitoring program.

AIMS

Primary Aims

- Engage the Lithgow community and promote interest in frogs, riparian protection and restoration, and biodiversity conservation in general.
- Establish a cost-effective and sustainable monitoring program for frogs of the Upper Farmers Creek Catchment.

Associated Aims and Benefits

- Support and promote riparian management.
- Monitor ecological outcomes of riparian management and the impact of other influences on riparian condition (e.g. climate, disturbance).

- Utilise the Australian Museum FrogID smart phone application to mobilise citizen scientists to collect useful ecological data.
- Enable the local community to identify frogs by call and sight, understand frog habitat needs, and factors that affect frog populations.

FOCUS AREA

The focus area encompasses the extent of Farmers Creek and associated tributaries covered by the Farmers Creek Masterplan; i.e. from below Farmers Creek Dam No. 2 downstream to the Great Western Highway.

There is a dearth of records for amphibians in the Lithgow area (Figure 1), with only 13 NSW Wildlife Atlas records for seven species, all from 2013 or later (Table 1). A brief survey in November 2017 by T. Kidd and D. Coote added a further three species to this list. The Atlas of Living Australia shows records for two other species: one for Western Banjo Frog (*Limnodynastes dorsalis*) from 2015, which is an error (this species is restricted to the south-western corner of Western Australia); and Booroolong Frog (*Litoria booroolongensis*) from 1975, a species which is now locally extinct.

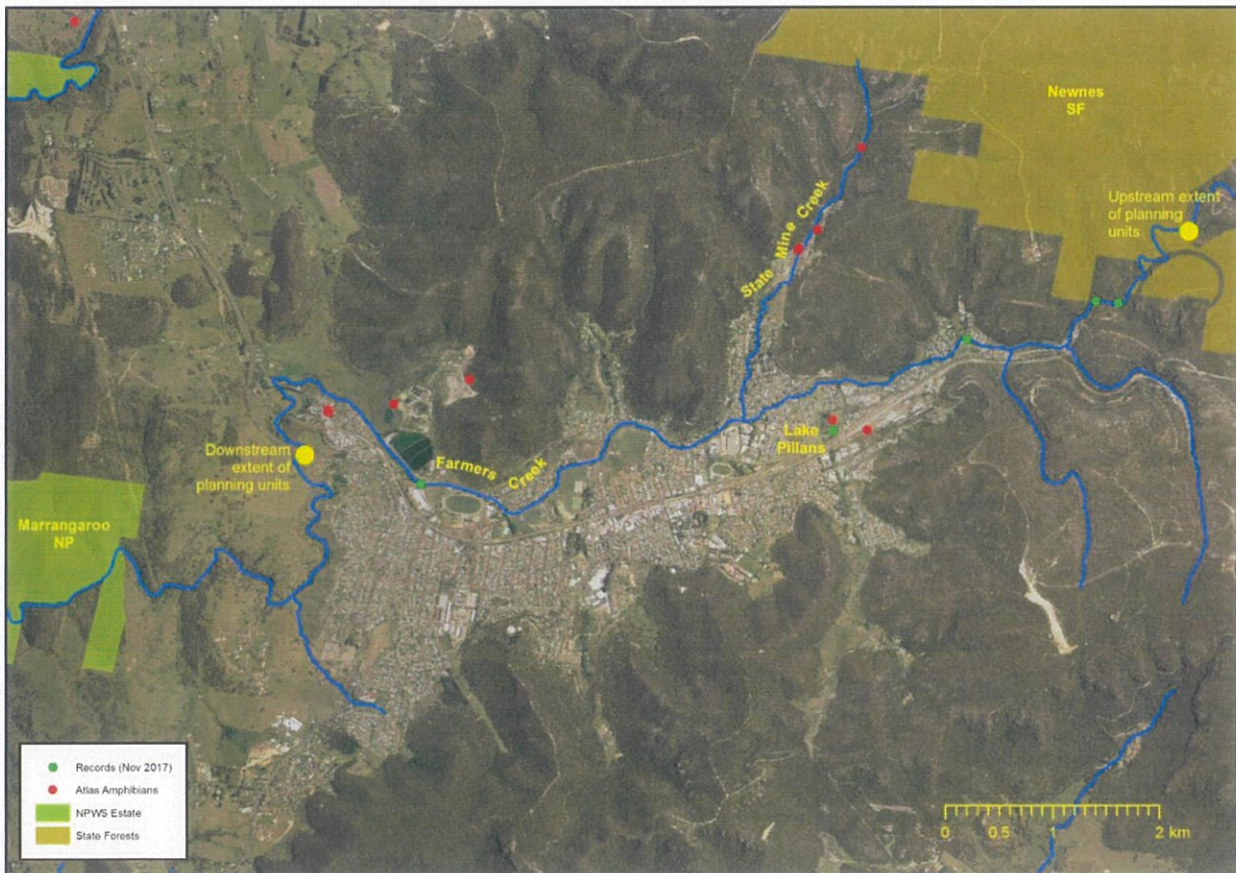


Figure 1. Upper Farmers Creek, showing known frog records.

Table 1. Known frog species from the Farmers Creek Masterplan area.

Common Name	Species
Eastern Sign-bearing Froglet ¹	<i>Crinia parinsignifera</i>
Common Eastern Froglet	<i>Crinia signifera</i>
Eastern Banjo Frog	<i>Limnodynastes dumerilii</i>
Striped Marsh Frog	<i>Limnodynastes peronii</i>
Spotted Marsh Frog	<i>Limnodynastes tasmaniensis</i>
Bleating Tree Frog	<i>Litoria dentata</i>
Peron's Tree Frog	<i>Litoria peronii</i>
Whistling Tree Frog ²	<i>Litoria verreauxii</i>
Bibron's Toadlet ¹	<i>Pseudophryne bibronii</i>
Blue Mountains Tree Frog ¹	<i>Litoria citropa</i>

¹ Records from November 2017 (T. Kidd and D. Coote)

² Three records for Brown Tree Frog (*Litoria ewingii*) were probably Whistling Tree Frog

PARTICIPANTS

Table 2. Potential participants and their roles.

Potential Participant	Potential Role
Lithgow Oberon Landcare Association	Regular frog monitoring Promotion
Lithgow residents	Regular frog monitoring
Lithgow City Council	Promotion Access
Department of Planning Industry and Environment	Coordination Initial planning and liaison with partners Field data collation and reporting
Australian Museum	FrogID App Promotion Frog ID data collation and reporting
Central Tablelands Local Land Services	Promotion

METHOD

Frogs will be recorded periodically via a combination of aural and visual observation at specified sites. Emphasis will be on aural observation given that it is often difficult and time-consuming to visually locate frogs; however, participants would be encouraged to attempt to locate frogs using a torch for eyeshine. Handling of frogs will be discouraged to avoid the transmission of disease; handling and potentially invasive searching for frogs would also require approvals under state legislation.

Participants will stand at a site for 5-10 minutes, listening and identifying frog calls. During this time, participants will make FrogID recordings (20-60 seconds). After the listening period, participants will decide which and how many of each frog species were heard. Results will be written down, identifying the site, date, time and weather conditions. Draft data requirements are shown in Table 3.

Following each monitoring event, datasheets will be sent to the Office of Environment and Heritage (OEH) for collation. FrogID recordings are submitted to the Australian Museum via the app., where calls are verified by experts. Data quality control is therefore ensured by comparing collated data with the calls identified by the Australian Museum.

Table 3. Draft data requirements.

Parameter	Data Requirement
Date and time	
Site Name/ID	[list]
Frog species	[list]
Number per frog species	1, 2, 3, 4, 5, 6-10 or >10
Weather (if a digital gauge is not available) ¹	
precipitation	nil, minor (inc. mist), moderate or heavy
wind	still, slight, moderate or strong
temperature	cold, mild or warm

¹ If a digital gauge is available, relative humidity will also be recorded.

Site Selection

Monitoring will be restricted to public tenure, and specific site selection will have regard to participant safety (e.g. away from roads or unstable stream banks). Site selection (see below) was stratified using the location of the Farmers Creek Masterplan planning units, which represent homogeneous stretches of broadly similar physiological attributes, as well as similar appearance and usage features. Rapid assessments undertaken for the Masterplan may also be used as a baseline for riparian condition, and if repeated would inform the results of monitoring.

The Masterplan identified 15 planning units which subdivide Farmers Creek (10), State Mine Creek (2) and Lake Pillans Wetlands and Vale of Clwydd Creek (3). Most of these planning units are aggregated in the Masterplan into three zones: the “Eastern Upstream Environmental Zone”, the “Central Urban Recreation and Open Space Zone” and the downstream “Western Heritage Zone”. These subdivisions guided the stratification and selection of seven representative sites (Table 4 and Figure 2).

Table 4. Stratification of monitoring sites.

Masterplan Zone	Masterplan Planning Unit	Description
Eastern Upstream Environmental Zone	Farmers Creek 1 (FC1)	[insert description to help navigate to site]
	Farmers Creek 3 (FC3)	
Central Urban Recreation and Open Space Zone	Farmers Creek 5 (FC5)	
	Vale of Clwydd Creek 3 (VoCC3)	
	State Mine Creek 2 (SMC2)	
Western Heritage Zone	Farmers Creek 9 (FC9)	



Figure 2. Location of monitoring sites.

Timing and Frequency

In order to accumulate comparable data, monitoring at each site will be undertaken within defined periods each year. Monitoring will also seek to span different seasons to capture different species with different peaks in activity. Each site will be monitored in Spring (October), Summer (December) and Autumn (March). Timing need not be more prescriptive: this will ensure the program remains flexible for volunteers and to also accommodate postponements resulting from sub-optimal weather conditions (e.g. high winds).

REFERENCES

Gondwana Consulting (2017) 'Farmers Creek Precinct Masterplan.' Final draft report V4 to Lithgow City Council, 24 January 2017.