

2 November 2020

Stephen Barry
Director of Planning
Independent Planning Commission

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Dear Stephen

**Re: Response to matters raised at Russell Vale Underground Expansion Project
Public Hearing**

We refer to the Public Hearing for the Russell Vale Underground Expansion Project (the Project) held by the Independent Planning Commission (IPC) on 19 and 20 October 2020. This letter provides a response on behalf of Wollongong Coal Limited (Wollongong Coal) to a number of matters raised in public submissions during the Public Hearing.

The submission theme is provided in italics, with Wollongong Coal's response provided in plain text below.

Economic Assessment

- 1. The Economic Impact Assessment understates the residual environmental and social impacts of the project. Environmental and social impacts should be assessed against a baseline of no mining and impacts on the community should therefore be attributed a cost.*

Wollongong Coal response:

The basis of the financial assessment undertaken for the Project is against a baseline of the Project not proceeding (that is, no further mining occurring at Russell Vale Colliery). The Base Case scenario also includes consideration of residual impacts associated with past mining operations and the rehabilitation of the Russell Vale Colliery under existing approvals. The costs associated with mitigating environmental and social impacts associated with the operations proposed as part of the Project, including those associated with implementing noise and air quality mitigation measures, are accounted for as part of the capital and ongoing operating costs of the project.

- 2. The full cost of greenhouse gas emissions abatement is a direct subsidy from Australian taxpayers. This full amount should be attributed to Australian taxpayers, not apportioned across global population.*

Wollongong Coal response:

The Economic Impact Assessment has been prepared in accordance with the NSW DPIE *Guidelines for the economic assessment of mining and coal seam gas proposals* (NSW Government 2015) which require Scope 1 and 2 emissions to be accounted for and to provide an estimate of the economic impact of GHG emission output to NSW only. GHG emissions are a global externality therefore the assessment of their economic impact to NSW only is based on NSW's relative share of the global population.

- 3. The Economic Impact Assessment overstates the benefits of the project as company taxes are unlikely to be paid based on reported company losses.*

Wollongong Coal response:

The Economic Impact Assessment has been prepared in accordance with the methodology outlined by the NSW DPIE *Guidelines for the economic assessment of mining and coal seam gas proposals* (NSW Government 2015). The assessment appropriately provides a financial analysis of the Project in isolation, including a calculation of tax payable based on project parameters. Broader company losses do not reflect the project in isolation.

- 4. Stated economic benefits to NSW will not be realised as the proportion of local shareholding is likely to be less than that assessed.*

Wollongong Coal response:

The Economic Impact Assessment was prepared based on a local shareholding of 35.4%. This figure was accurate at the time of the analysis. The current local shareholding as at the date of this letter is 38.3%. It is noted that shareholdings in any company are dynamic and have the potential to increase or decrease at any point.

- 5. The cost of ongoing water treatment is not considered in the Economic Impact Assessment.*

Wollongong Coal response:

Treatment of water inflows during mining operations are considered as part of the operational costs.

While costs associated with the treatment of adit outflow water following the completion of mining are not specifically identified in the economic assessment, it is noted that adit outflows will occur under both the Base Case and the Project scenario. The Project case does not involve any additional operational costs. In this regard, these costs would effectively cancel each other out in the assessment.

- 6. The Economic Impact Assessment overstates the number of jobs likely to be created based on historical figures.*

The Project is expected to require an operational workforce of 205 employees and contractors. The proposed workforce is comprised of 135 employees directly engaged to operate the three production units per shift over the five shift rosters for 24/7 production. Each production crew is made up of a deputy, 6 operators and two tradesmen.

The remaining 70 mine personnel cover a number of functions over the 7-day cycle, including:

- Statutory engineering managers (3)
- Supervisors (13)
- Engineering/Technical support (10)
- Maintenance personnel (22)
- Compliance functions (10)
- Control room operators (5)
- Survey (2)
- Stores (3)
- Administration Support (2)

It is noted that historic personnel numbers at Russell Vale Colliery were suited to a longwall mining operation. The operational workforce required for the Project reflects the more labour intensive bord and pillar operations.

7. The Economic Impact Assessment underestimates the number of locally sourced jobs.

Wollongong Coal response:

Given the Russell Vale Colliery has been in Care and Maintenance for a number of years, the Economic Impact Assessment and Social Impact Assessment conservatively estimate that approximately 20% of the project workforce will be sourced locally from the Wollongong local area, with the remaining 80% sourced from outside the local area. It is recognised that this is a conservative estimate and the actual number may well be higher. Prior to Russell Vale Colliery going in to Care and Maintenance, approximately 90% of employees resided within the region, with the remainder residing in Sydney or Queensland.

It is noted that should a larger proportion of employees be sourced locally, the stated economic benefit to the local region would be greater than that assessed by the Economic Impact Assessment.

Water Licencing

8. The Project is required to hold a water access licence.

Wollongong Coal response:

As discussed in the Russell Vale Colliery Revised Underground Expansion Project Submissions Report Part B, Wollongong Coal holds a current Water Access Licence (WAL36488) for 515ML (units) per year within the Sydney Basin Nepean Groundwater Source - Nepean Management Zone 2, and were successful in a bid for a further allocation of 100 units within this groundwater source in early 2020. Wollongong Coal therefore holds sufficient allocation to account for the predicted maximum groundwater inflows to Russell Vale Colliery workings of 288 ML/year.

Based on the peer reviewed uncertainty analysis prepared for the Project, the peak reduction in baseflow for Cataract River, Cataract Creek and Bellambi Creek combined is predicted to be very small, with the volume apportioned to the Project being between 2.3ML/year and 6ML/year¹. This compares to the Independent Expert Panel for Mining in the Catchment's estimate of surface water losses from over the existing Dendrobium, Wongawilli and Russell Vale mines of an average of 8 ML/day (2,920ML/year), and estimated leaks from the Greater Sydney supply infrastructure of approximately 130 ML/day² (47,450ML/year).

Wollongong Coal currently holds sufficient licences to account for the volume of predicted water take at Russell Vale Colliery. These licences are however held in the water sharing plan relevant to groundwater sources only.

In the event that surface water entitlements for the Project's predicted impact on baseflow of 2.3-6ML/year cannot be acquired via trading options, WCL will continue to consult with DPIE Water regarding appropriate licensing and/or other offsetting mechanisms to account for the predicted very small volumes of surface water take associated with the Project.

It is noted that in a media release dated 18 April 2020, the NSW Minister for Planning and Public Spaces outlined that as part of an action plan to respond to the Independent Expert Panel for Mining in the Catchment Final Report, that the NSW Government intends to implement a "licensing regime to properly account for any water losses".

The NSW DPIE has recommended draft condition of consent B12 in relation to water licences.

B12. The Applicant must obtain all necessary water licences for the development, including during rehabilitation and following mine closure, under the Water Act 1912 and/or the Water Management Act 2000 prior to the take of water occurring, or an alternative mechanism agreed by the Planning Secretary and DPIE Water.

Wollongong Coal considers draft Condition of consent B12 to be appropriate and lawful in that it reflects the current obligations of the *Water Management Act 2000* and acknowledges the potential for an alternate lawful mechanism to exist.

Risk of pillar collapse in the Bulli Seam

9. *The Project presents an unacceptable risk to the stability of any remaining standing pillars in the Bulli Seam.*

Wollongong Coal response:

The Project has been designed with long term stable pillars so as to avoid destabilisation of overlying workings.

A peer reviewed assessment of the risk of pillar failure was completed for the Project by SCT³. The assessment confirmed that the risk of pillar failure within the indefinite life of the pillar system proposed for the Wongawilli Seam workings is very rare to negligible.

The risk of pillar failure assessment concluded that there was no potential for the first workings in the Wongawilli Seam to destabilise large pillars in the Bulli Seam.

¹ HydroAlgorithmics, 2020. *Russell Vale Colliery Underground Expansion Project – Groundwater Uncertainty Analysis*.

² Independent Expert Panel for Mining in the Catchment (IEPMC), 2019. *Independent Expert Panel for Mining in the Catchment Report: Part 2. Coal Mining Impacts in the Special Areas of the Greater Sydney Water Catchment*, Prepared for the NSW Department of Planning, Industry and Environment.

³ SCT, 2020. *Quantitative Assessment of Risk of Pillar Failure in Russell Vale East*. Prepared for Wollongong Coal.

The only potential therefore for further subsidence arising from historical Bulli Seam workings is limited to goaf areas. If remnant pillars in Bulli Seam goaf areas have already collapsed, there is no potential for further subsidence. If there remains any standing remnant pillars, there remains the risk of further subsidence should these pillars collapse. This risk exists independent of the Project, and as confirmed by the peer reviewer⁴, the Project is unlikely to change this existing risk.

SCT undertook a review of all available evidence to determine the potential for any large areas of standing pillars to remain in the Bulli Seam. This review concluded that based on all available evidence and understanding of mining systems used within the Bulli Seam, it is “almost certain” that goaf areas within the Bulli Seam have already collapsed and there is no potential for further instability with or without the Project⁵.

SCT recommend that this can be confirmed during roadway development within the Wongawilli Seam. This recommendation will be adopted by Wollongong Coal and addressed as part of the Extraction Plan process.

Despite all indications that Bulli Seam goaf areas have already subsided and therefore no potential for further instability exists, SCT undertook an assessment of the probability of first workings in the Wongawilli Seam to cause instability of any standing pillars in the Bulli Seam. SCT estimate the probability to be less than 1%⁶.

10. The existence and distribution of any marginally stable pillars in the Bulli Seam must be established.

Wollongong Coal response:

A detailed review of the distribution and status of any potentially standing pillars in the Bulli Seam was undertaken as part of the peer reviewed Quantitative Assessment of Risk of Pillar Failure⁷ described in the above response. The location of Bulli Seam goaf areas yet to be confirmed as fully collapsed is provided as Figure 1 in this assessment and replicated as **Figure 1** below. The mine plan was developed based on analysis of historical mining.

As noted in the above response, confirmation that the seven Bulli goaf areas in question have in fact fully subsided will be obtained during roadway development within the Wongawilli Seam. This will involve monitoring of roadway conditions, ground movement and abutment loading in the Wongawilli Seam roadways below goaf edges to provide data on the condition of overlying strata. Monitoring will be supported by TARPS for roof support that will identify appropriate levels of roof support based on ground conditions. This monitoring process will be addressed as part of the Extraction Plan required by the draft conditions of consent proposed by NSW DPIE.

Wollongong Coal note that it is not feasible to accurately confirm the status of these goaf areas by other methods prior to commencing first workings roadways in the Wongawilli Seam.

As detailed in the response above, the risk of further subsidence from these Bulli Seam goaf areas exists independent of the Project, and as confirmed by the peer reviewer⁸, the Project is unlikely to change this existing risk.

⁴ Hebblewhite B K, 2020. Report No. 2003/03.5 Peer Review – Russell Vale Colliery Assessment of Risk of Pillar Failure Supplementary Summary Report. Prepared for Wollongong Coal.

⁵ SCT, 2020. Quantitative Assessment of Risk of Pillar Failure in Russell Vale East. Prepared for Wollongong Coal.

⁶ SCT, 2020. Quantitative Assessment of Risk of Pillar Failure in Russell Vale East. Prepared for Wollongong Coal.

⁷ SCT, 2020. Quantitative Assessment of Risk of Pillar Failure in Russell Vale East. Prepared for Wollongong Coal.

⁸ Hebblewhite B K, 2020. Report No. 2003/03.5 Peer Review – Russell Vale Colliery Assessment of Risk of Pillar Failure Supplementary Summary Report. Prepared for Wollongong Coal.

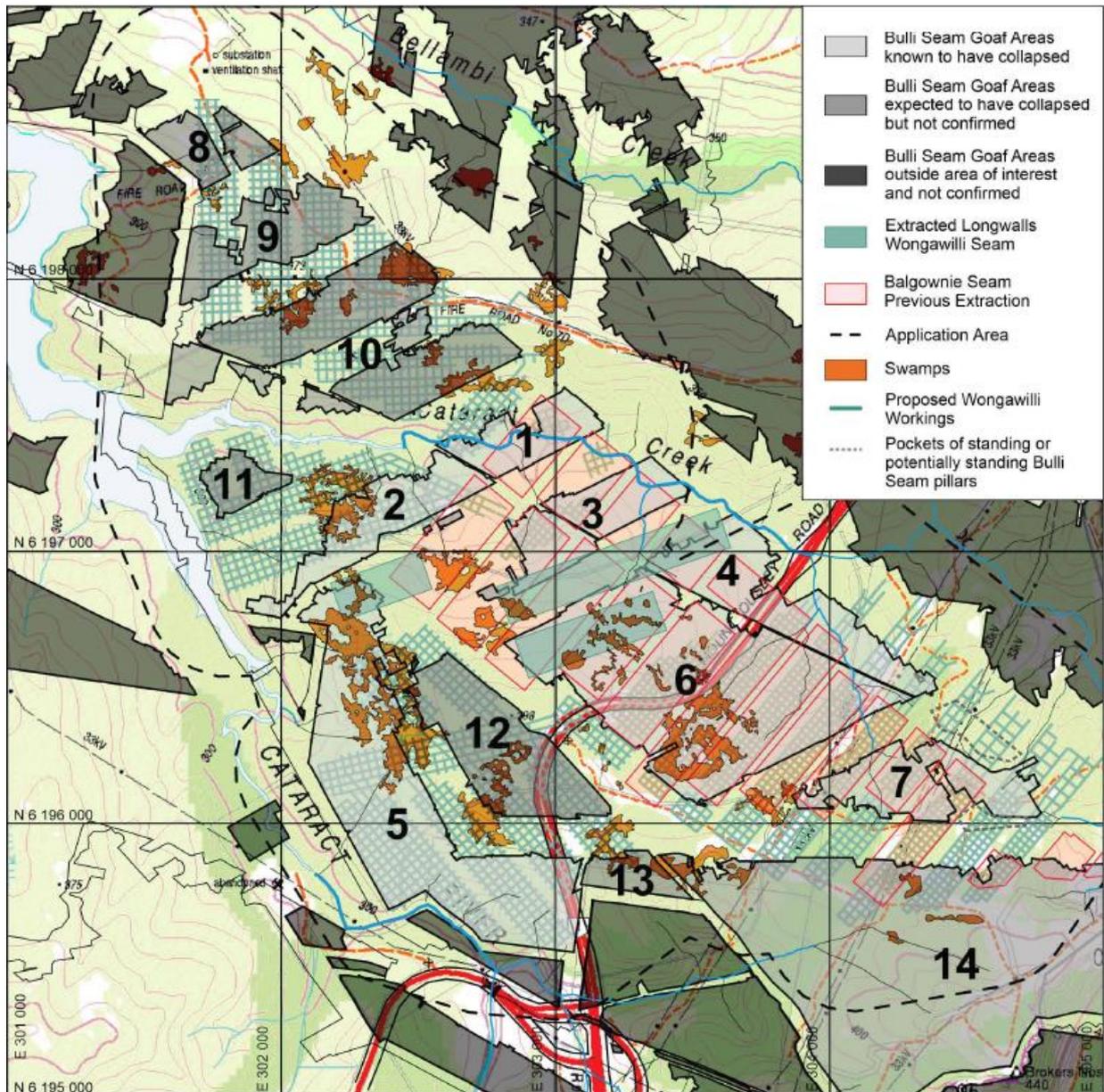


Figure 1 Plan showing location of swamps and proposed first workings in the Wongawilli Seam relative to previous secondary extraction in Bulli Seam (Grey), Balgownie Seam (Red) and Wongawilli Seam (Dark Green)⁹

⁹ SCT, 2020. *Quantitative Assessment of Risk of Pillar Failure in Russell Vale East*. Prepared for Wollongong Coal.

Impacts associated with removal of longwall equipment

11. *The impacts associated with 25 metres of longwall mining required to remove longwall equipment has not be considered.*

Wollongong Coal response:

As outlined in the Revised Preferred Project Report, Wollongong Coal propose to retrieve the existing longwall mining equipment that is currently located within LW6. It is considered that the retrieval of the longwall equipment is a reasonable expectation and demonstrates Wollongong Coal's commitment to no further longwall mining within the lease area.

The longwall equipment is currently located approximately 25 m short of the next gate road access point that would allow for its safe removal. Recovery will therefore require the mining of this 25 m section of LW6 to facilitate removal. This mining has been previously assessed and approved under the existing *Russell Vale East - LW6 (365m) Extraction Plan* (Hanson Bailey, 2015c) and represents the panel retreat between 340 - 365 m of LW6.

The Russell Vale Colliery operates under Project Approval (PA) 10_0046 and has been on 'care and maintenance' since 2015. PA 10_0046 (as modified) remains valid and authorises the ongoing use of surface infrastructure and 5 shafts at Russell Vale Colliery as well as a range of mining activities, including development mains in the Wongawilli Seam and extraction of longwall panels 4, 5 and the first 365 metres of LW 6. Schedule 2, Condition 5(a) of PA 10_0046 however requires that no mining occur after 31 December 2015, thereby preventing the completion of LW6 extraction and retrieval of the longwall equipment.

The Revised Preferred Project seeks approval to recommence mining within the Russell Vale Colliery based on a revised mine plan, and allowing for the completion of mining previously assessed and approved under PA 10_046 and the *Russell Vale East - LW6 (365m) Extraction Plan* only to the extent of the 25m required to enable retrieval of the longwall equipment.

It is noted that this additional 25 metres of mining is also approved under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* by approval 2014/7259.

These works will be undertaken in accordance with existing approved *Russell Vale East - LW6 (365m) Extraction Plan* and EPBC 2014/7259.

Increased bushfire risk

12. *Groundwater drawdown and draining of swamps will increase fire risk.*

Wollongong Coal response:

As outlined by the peer reviewed Groundwater Assessment, the Project is unlikely to result in any observable groundwater drawdown effect, no perceptible impact on upland swamps and no perceptible reduction in stream baseflow. The Project is therefore not predicted to have any perceptible impact on groundwater or surface water regimes that could potentially influence fire risk.

Water Quality Impacts on Bellambi Lagoon

13. *The Project will impact water quality in Bellambi Lagoon and the current EPL does not protect the environmental values of the lagoon.*

The Russell Vale Colliery Pit Top is located entirely within the catchment of Bellambi Gully Creek (refer to **Figure 2**). Bellambi Gully Creek flows to the ocean at the southern end of Bellambi Beach, north of Bellambi Point.

Bellambi Lagoon is located south of Bellambi Point on Corrimal Beach and is not located within the catchment area of Bellambi Gully Creek. Bellambi Gully Creek does not flow into Bellambi Lagoon. The Project will therefore not impact water quality in Bellambi Lagoon.

Yours sincerely

A handwritten signature in black ink, appearing to be 'G. Allan'.

Gabrielle Allan
Manager Planning and Assessment NSW

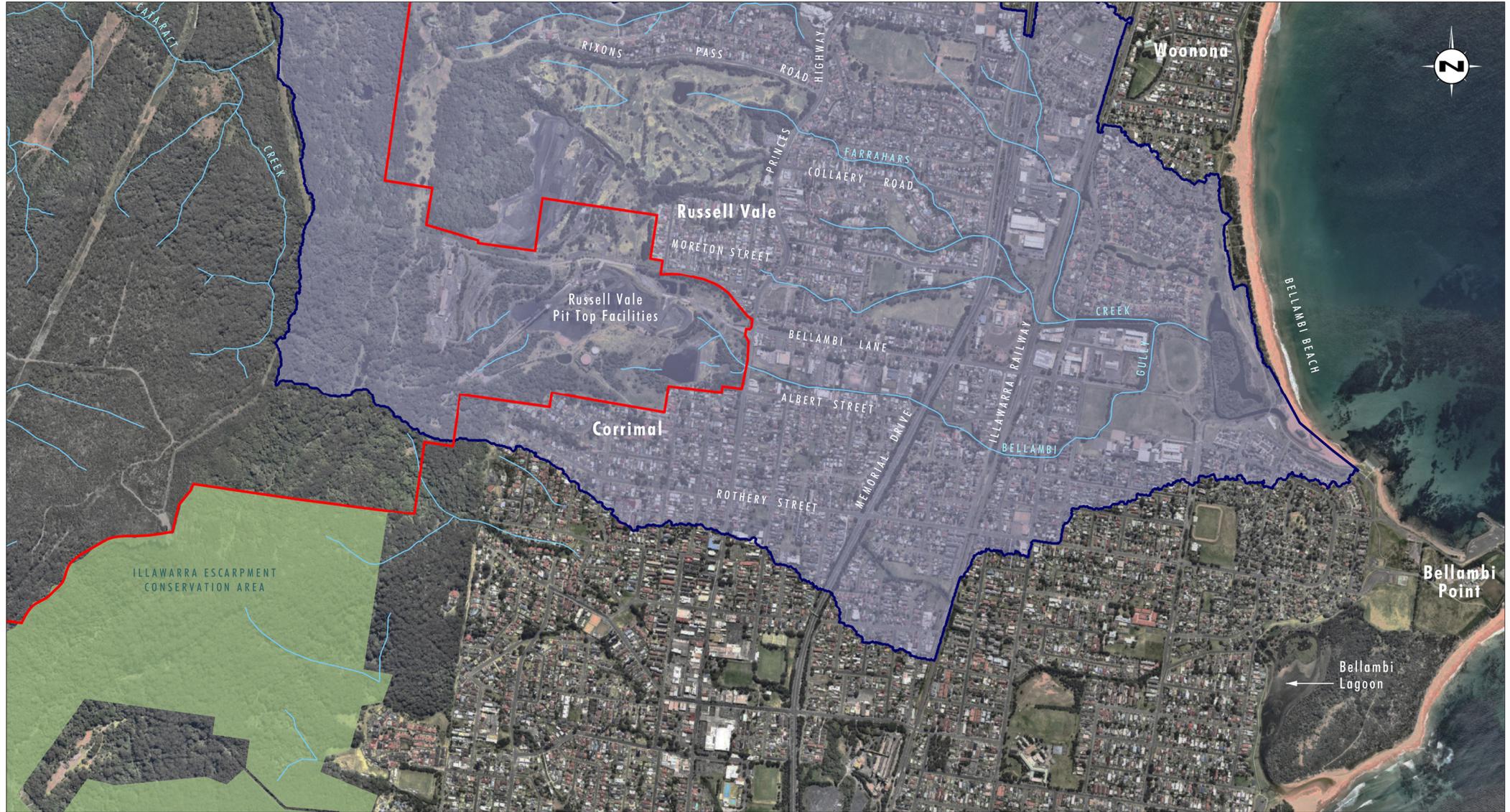


Image Source: NearMap (Oct 2016)
 Data Source: Wollongong Coal (2016), NSW Environment Planning Industry (2018)

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Legend

- ▭ UEP Project Application Area
- ▭ Bellambi Gully Creek Catchment

FIGURE 2

Catchment Context