Wilderness Australia

Ms Gabrielle Allan
Principal Planning Officer
Energy Resource Assessment
NSW Department of Planning and Environment

Via email: gabrielle.allan@dpie.nsw.gov.au

Thursday 12 October, 2023

Dear Ms Allan,

**Objection to modification 5 deals Angus Place Mine's consent (MP06_0021) and modification 8 to Western Coal Services (SSD-5579)**

Centennial Coal proposals have requested modifications to Angus Place Mine consent (MP06_0021) through modification 8 and Western Coal Services consent (SSD-5579) through modification 5. Wilderness Australia objects to both these modifications. The following submission covers both these modification proposals.

Wilderness Australia (formerly the Colong Foundation for Wilderness) believes the activities undertaken under these modifications are likely to drain unique wetlands and so place new areas of the Gardens of Stone conservation reserve at risk of damage. Wilderness Australia also believes that recommencement of large discharges of mine water to Sydney's drinking water supplies via Wangcol Creek shall have a significant environmental impact.

Wilderness Australia is a community conservation organisation that campaigns for the protection and management of wilderness, national parks and other large natural areas. The organisation was founded in 1968 (as the Colong Committee) and has played a major role in many important conservation achievements over the past 55 years in NSW. Many of these achievements are highly valued by the community. Yet they were only achieved by sustained and vigorous public action supported by forward-looking governments and government agencies. These achievements include the expansion of the national park system in the Blue Mountains and its culmination in the World Heritage listing of the million-hectare Greater Blue Mountains Area in 2000.

For over thirty years the Colong Foundation – now Wilderness Australia - has worked towards the reservation of a Gardens of Stone State Conservation Area over state forests near Lithgow. The tourism value of this new reserve lies in its scenic "pagoda" landscapes of stone pinnacles, slot canyons, waterfalls, and extensive cliff lines that are associated with highly diverse plateau and tableland forests, rare plants, nationally endangered swamps and windblown sand dunes from the last Ice Age. These significant natural features make up a complex and stimulating natural wonderland just two hours from Sydney and readily accessible by vehicle.

Pagoda landscapes have a unique cachet, as an outstanding, must-see scenic attraction. Given appropriate visitor management, presentation and marketing as *Destination Pagoda*, this attraction will bring new visitors to Lithgow. No other resource value in the Lithgow region has this cachet or a significant power to attract tourists.

These scenic pagoda landform values are only offered in the Lithgow region and nowhere else, not in Australia or elsewhere. They are internationally significant values. With appropriate management by the NSW National Parks and Wildlife Service (NPWS) this region will now become a major tourism designation that can significantly benefit the regional economy.

Protection and effective management of the many natural heritage values in and around Lithgow is necessary to provide long term employment benefits for the next generation, encouraging them to stay in Lithgow. The rehabilitation of the Gardens of Stone heritage values through reserve establishment contribute to employment, Lithgow's lifestyle attractions and encourage new residents.

Centennial Coal is legally required to 'offset' elements of its mine damage to nationally endangered swamps that enables $28 million in compensation to be coupled with the conservation management of the new reserve. Such payments do not consider all mine impacts on pagoda landscapes, let alone provide the full protection for their unique natural heritage.

Financial compensation offsets do not protect the impacted heritage values. Offsets, and particularly financial offsets, pale when compared to what is needed, substantial environment protection (i.e. avoidance of heritage value damage) or effective mitigation of environmental impacts.

Avoidance and mitigation mechanisms are part of NSW and Federal Government offset policies. Consideration of avoidance and mitigation are required before like-for-like offsets or, as a last resort, financial offsets are considered. For these modification proposals these mechanisms were not considered and the potential impacts on heritage values were improperly assessed.

While Centennial Coal has partly offset some of its swamp impacts, this company has resisted paying for the maintenance of roads its employees and contractors have severely damaged over decades so that certain roads are in a ruinous state. The NPWS is now spending $8 million of road reconstruction as the first step in reserve establishment. It is impossible to establish visitor facilities in the new reserve until these roads that Centennial has damaged are repaired. This expenditure is a subsidy for reconstruction of roads that Centennial Coal and its contractors have ruined.

The Department of Planning and Environment should require Centennial Coal to pay for the reserve road reconstruction through conditioning future consents and modifications appropriately. By way of comparison, Clarence Sands is paying $3.5 million for the reconstruction of the Old Bells Line of Road in this reserve.

Why should quarry fund road restoration while Centennial Coal mines does not do so, simply because the latter does not want to? Your Department should remedy this disparity in obligations.

A Gardens of Stone State Conservation Area allows for the final stages of appropriate conditioned coal mining to be concluded and protection of national and internationally significant heritage upon which future tourism depend. This can only be achieved if the Department works towards this objective, otherwise the new reserve shall be further damaged.

Given current mine management and development control practices do not meet this performance objective, Wilderness Australia believes a more detailed review of these modifications is warranted by the NSW Department of Planning and Environment (DPE). These modifications should be withdrawn and reviewed as part of the Angus Place West major project of which they are an integral part.

**Public Exhibition challenges**

The short window for public comment on three related Centennial Coal modification proposals opened at the beginning of the October long weekend. This timing effectively denies the public the 14-day minimum time permitted under planning law for review and comment on modification proposals.

It is difficult to make a considered submission in such a short time frame, especially when the information in the modification report appears incomplete. For example, there is no figure provided of the Angus Place mine areas 800 and 900 where mine water pumping is proposed. I found such a figure eventually in a 2018 report by Centennial dealing with Coxs River swamps that permitted me to consider the potential for far-field impacts associated with the proposed pumping. Other figures are provided to assist DPE to determine whether assessment of potential far-field impacts should be required from Centennial Coal before these modifications can be determined. Wilderness Australia believes that such far-field potential impacts should be considered.

In relation to Surface waters, mine water management and transfers, the modification report refers to a further **Section 0** at pages 18, 19 and again under assessment of impacts page 31. There is no Section 0 in the modification report that provides further details on water and water management.

Centennial has apparently provided an incomplete modification report to be placed on exhibition without a Section 0 or a figure indicating the location of mine areas 800 and 900 Angus Place (see Appendix A - GHD Water Assessment figure 2.1 showing bores but not mine areas).

Similarly, figure 1.2 of the modification report indicating the location of the Western Coal Services coal stock pile, sediment ponds, washery and Wangcol Creek, but not the Mt Piper Power Plant ash stockpile. This figure does not easily permit a reader to see (let alone comprehend) the flow pathway of the proposed mine water discharge through the highly contaminated Western Coal Services site to LDP001.

**These modifications should be part of the Angus Place West proposal**

Modifications are supposed to allow for minor changes to approved major projects. These proposed modifications could damage nationally endangered swamps and plants and drain water from streams in the new Gardens of Stone State Conservation Area. These proposals seek to permit the discharge of 10Ml/day of mine water into the Coxs River catchment and so by-pass the $200 million reverse osmosis mine water treatment plant. These changes are not minor matters but require further consideration than that which can be given to them in the modification process.

By carving out these changes as modification requests, it appears that Centennial Coal is trying to get around the purposes of the *Environmental Planning and Assessment Act, 1979* to avoid adequate assessment and review of potential environmental impacts of significant changes to existing consents.

The executive summary of the modification report makes the connection to Centennial's expansion plans clear when it concludes, "The proposed modification will … safeguard the feasible recovery of the coal resource remaining at the mine."

Modification 8 for Angus Place and modification 5 for Western Coal Services are part of the proposed activities necessary for Centennial's major project to expand mining in the Angus Place West area – which is going through a state significant development application process.

Further, if approved, these modifications could obscure the extent of impacts from the future Angus Place West mine expansion proposal on national heritage in the new Gardens of Stone reserve.

The impacts of these modifications should be assessed in totality with the proposed Angus Place West mine expansion proposal, rather than piecemeal through these modifications. The modifications should be withdrawn and the changes they seek should be included in Centennial's state significant development application for the Angus Place West mining area so that they can be appropriately assessed.

**Damage to unique wetlands**

In 2018, Angus Place Mine Modification 5 was approved allowing pumping at a rate of 10 ML/day from mine workings (areas 800 and 900). Following this approval, the groundwater table dropped between 21 in area 800 and 30 metres in area 900 (reference - Centennial Coal, Coxs River Swamp Review, July 2018, page 44). This drop in groundwater was observed to quickly dry out Kangaroo and Lambs Creeks and associated swamps, as well as a headwater tributary of the Coxs River beside the Wolgan Road and associated swamps (Lithgow Environment Group, pers. comm. 4 Oct, 2023).

A 2018 Coxs River swamp review by Centennial Coal for Angus Place mine did not consider the potential for loss of surface water and near-surface groundwater due to far-field groundwater impacts. On Newnes Plateau, the Independent Monitoring Panel identified a loss of water in streams and swamps that extended 2km from Springvale mine operations to be far-field impacts related to those operations (reference - Independent Monitoring Committee for Springvale mine page 9, June 2021). Such far-field impacts would explain the observations made by Lithgow Environment Centre in 2018 and why future surface water losses from dewatering areas 800 and 900 may be expected.

In its 2018 report Centennial Coal attempts to "pass off" observed sudden drops in groundwater in Coxs River swamps and loss of stream flows due to drought conditions and that such losses could not be associated with coal mine due to the presence of clay and shale aquicludes. These seemingly obvious explanations overlook a plausible explanation of sudden water loss from far-field dewatering impacts. These observed sudden losses of surface waters and near-surface groundwaters were probably associated with lineaments that connect the Coxs River and Kangaroo and Lambs Creeks with the 800 and 900 mine voids (see figure on following page 6).

The proposed modification 8 which would allow pumping at 10ML/day from areas 800 and 900 will again lower the groundwater table by between 21 and 30 metres.

Due to the proximity of the Lithgow Coal seam to the surface at Angus Place West project area, the proposed pumping may also cause regional drawdown and localised far-field drawdown of near-surface groundwater, streams and swamps where lineaments intersect mining voids.

The proposed pumping may damage Kangaroo and Lambs Creeks and swamps, as well as the upper Coxs River and its swamps. Nationally endangered plants may also be harmed, including *Xerochrysum palustre* (Swamp everlasting), *Pultenaea glabra*, *Kunzea cambagei*, *Veronica blakleyi*, *Grevillea acanthifolia*, *Gentianella cunninghamii*, *Prasophyllum australe* and Latham's Snipe (a rare migratory bird species).

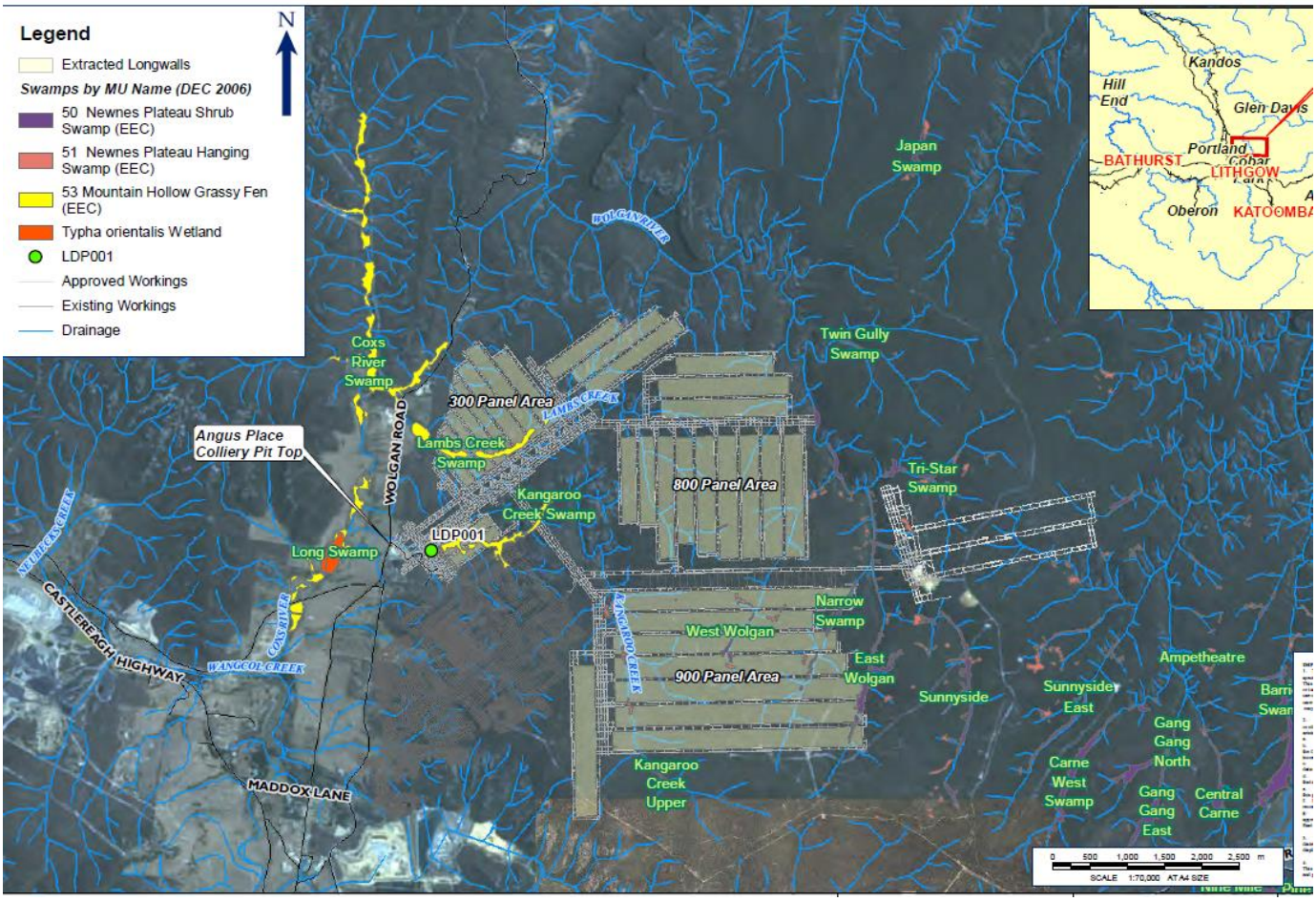
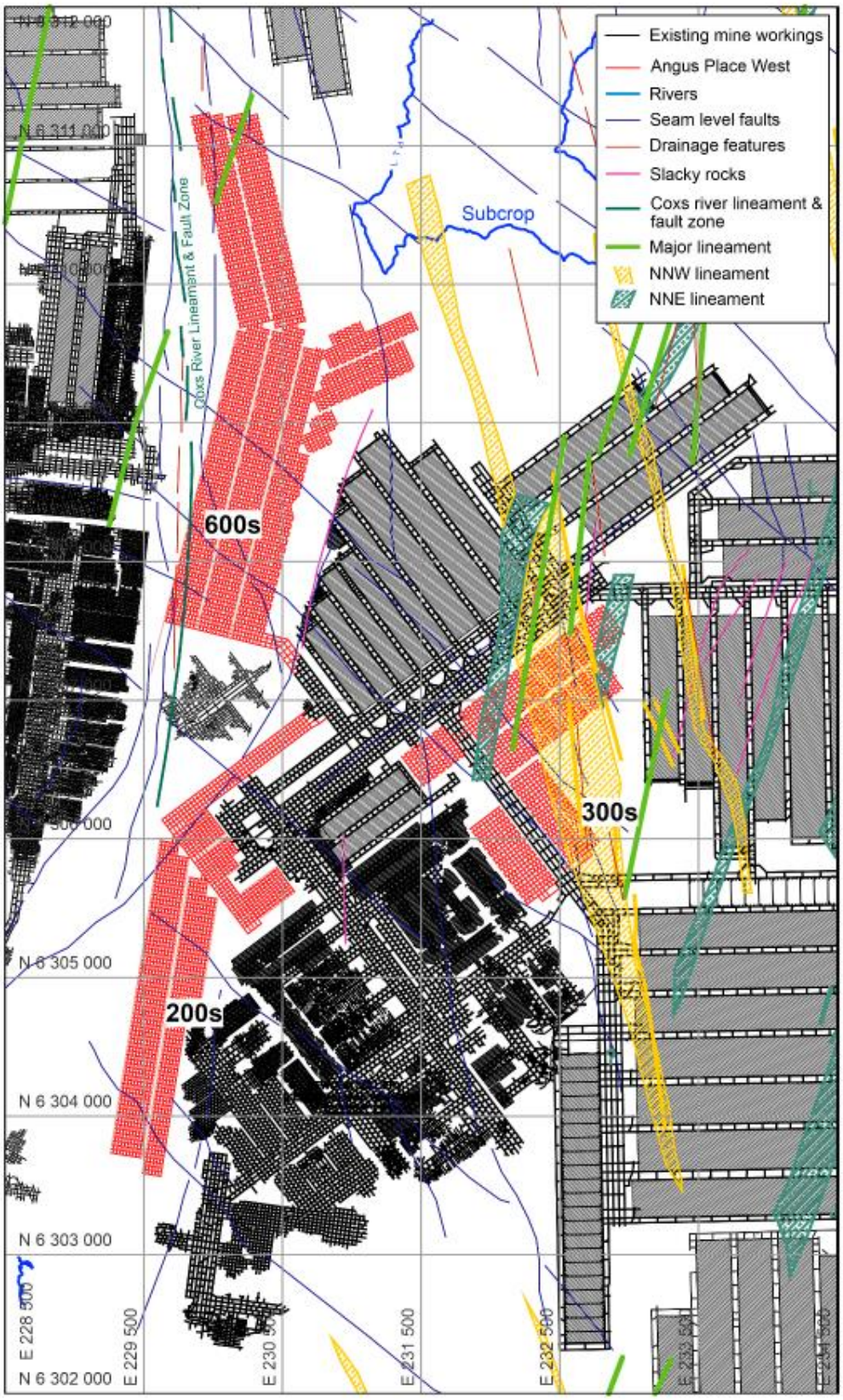
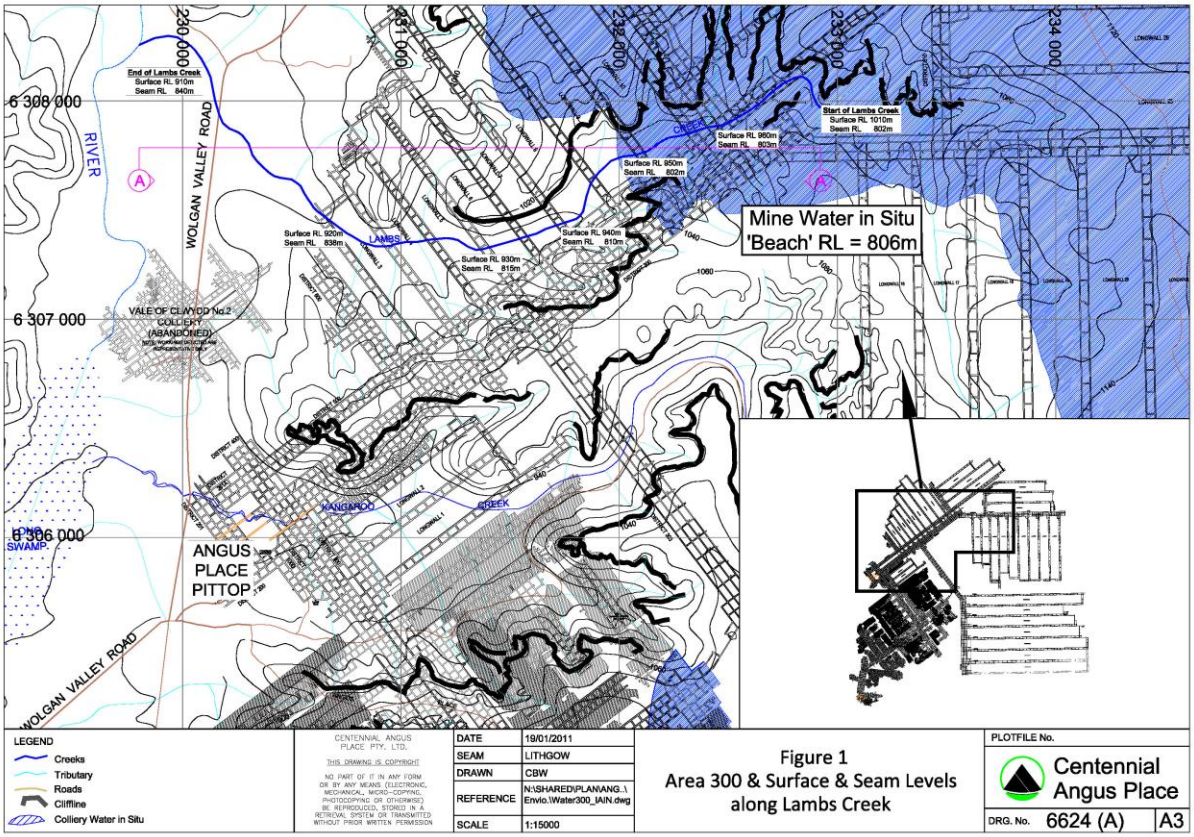



*Figure indicates the 800 and 900 mining voids proposed to be dewatered are within 2km of EEC swamps (reference:* Centennial Coal, Coxs River Swamp Review, July 2018, figure is in *Appendix A, page 4).*




*This figure indicates that lineaments intersect Mine Areas 800 and 900 as well as the in the Angus Place West project area. Far-field drawdown of swamps and streams in the project area is likely, i.e. drawdown of Lambs and Kangaroo Creeks and swamps, as well as the Coxs River and its swamps.*




*This Centennial Coal figure indicates how the Colliery water surface in blue at Area 300 relates with Area 800. Dewatering area 800 and 900 will also dewater Area 300. The depth to coal seam is less than 150m. The interaction between dewatering of these shallow mine workings and surface waters seem likely.*

**Contamination of Sydney's drinking water supplies**

The Angus Place mine water includes dissolved arsenic, dissolved selenium, ammonia, and fluoride (modification report, pg32). The mine effluent will have elevated levels of heavy metals if salinity is to achieve the proposed 350µS/cm standard but it **will not achieve this standard at the discharge point LDP001**. The modification report states that at LDP001 salinity at LDP001 will be highly elevated (Scenario 1. 1261 µS/cm; Scenario 2. 1197 µS/cm; Scenario 3. 1336 µS/cm).

Mine water should not be discharged into a waterway that is part of Sydney's drinking water supplies.

The additional Angus Place mine water should be treated in the existing reverse osmosis water treatment plant or additional reverse osmosis water treatment plant capacity should be constructed.

This proposed level of treatment to the 350µS/cm standard will not adequately protect aquatic ecosystems, especially regarding macroinvertebrates, given the flow path of mine water is through Western Coal Services to LDP001 and into Wangcol Creek produces highly elevated salinity.

The 10ML/day discharge of mine water is proposed to pass through two sediment control ponds and then Cooks Dam before ultimately flowing to LDP001. Discharges from SCSS to Wangcol Creek via LDP001 will increase from approximately 2.88ML/day on average under existing conditions to approximately 12.88 ML/day on average (modification report, pg 31), about a five-fold increase in flow of highly saline water.

Existing flows from LDP001 are predominantly made up of contaminated groundwater that flows into Cooks Dam. Contaminants in Cooks dam include dissolved boron, dissolved cobalt, dissolved manganese, dissolved iron, dissolved nickel and dissolved zinc (Modification Report, pg 31,). Cooks Dam is located within a backfilled mine void and is a primary collection and management point for dirty water at Western Coal Services (Modification Report, Appendix A, page 1) and typically has a salinity of 2,900 uS/cm (App A, pg 3).

Cooks Dam is an inappropriate place to send the proposed 10ML/day of mine water on its way to be discharged. The discharge of mine water through Cooks Dam is inappropriate as it will flush out the essentially limitless contaminants in this primary dirty water collection point. It would be better to pipe the mine water to WCS LDP001 rather than claim a beneficial reduction in salinity by adding mine water to Cooks Dam.

Wangcol Creek flows to the Coxs River and is part of Sydney's Drinking Water Catchment. The modifications will not only see more contaminated mine water going into the Wangcol Creek from the Western Coal Services site but more contaminants from Cooks Dam going into Wangcol Creek.

The proposed discharges could not meet the "neutral or beneficial" test for water pollution because it adds to the overall pollution load in the creek.

The transfer of 10ML/day of mine water from Angus Place to the Western Coal Services site for discharge should not be allowed. The existing consent for the Springvale mine extension area does not allow such a discharge, and the modification should bring Angus Place into compliance with this provision, rather than undermine it. Adding mine water to a highly polluted element of the Wangcol Creek catchment must surely flush out more heavy metals from that contaminated site. These contaminated discharges would then enter the Coxs River, a key part of Sydney's water catchment that flows through the Greater Blue Mountains World Heritage Area.

These modification proposals to allow large discharges of contaminated mine water and Cooks Dam water to defeat the purpose of the Springvale Water Treatment Project (SSD-7592, approved in June 2017) that was built to eliminate mine water discharges into the Coxs River catchment from Springvale Mine and Angus Place Colliery. These modification proposals should be refused consent to protect Sydney's water supplies.

Centennial Coal has been aware of its need to discharge this additional mine water for a considerable time and should have incorporated a reverse osmosis water treatment into these modification proposals. It is not appropriate to defer additional reverse osmosis treatment as this temporary arrangement may become more or less permanent, as indeed suggested by proposed Modification 9 for the Springvale Mine that seeks extend temporary discharges of mine water into Thompsons Creek dam!

**The modification proposals should be a controlled action under the EPBC Act**

We are concerned the modifications have not been referred for Commonwealth assessment under the EPBC Act. We believe that this project is likely to have significant impacts on water and that the modifications should be referred to Environment Minister Plibersek to determine if the water trigger applies. Commonwealth assessment and the application of the water trigger is important to ensure that there is rigorous assessment of the surface and groundwater impacts of the modifications.

Centennial Coal has failed to demonstrate that Modification 8 Angus Place and Modification 5 Western Coal Services do not impact of matters of national environmental significance. The modifications should be controlled actions under the Federal *Environmental Protection and Biodiversity Act* (EPBC Act) for the following reasons:

- As "large coal mining" developments that will have, or are likely to have, "a significant impact on a water resource" the proposed modifications should be controlled actions under s 24D of the EPBC Act (known

as the “water trigger”) because the scale of the discharge 10ML/day and its potential of that flow to mobilise and disperse the salinity from Cooks Dam at WCS flowing into Wangcol Creek via LDP001.

- These modifications will cause 10ML/day of mine water to be discharged (with additional salinity from Cooks Dam) into Wangcol Creek that flows 2.5km downstream into the Coxs River that then flows through the Greater Blue Mountains World Heritage Area. Any downstream impacts of mine water arising from the proposed modifications on World Heritage values of the World Heritage property must be considered.

- Due to groundwater drawdown associated with the Angus Place modification 8 mine water pumping proposal, depressurisation between surface and the near-surface groundwater aquifers is possible due to possible far-field impacts and/or regional groundwater drawdown and could alter the existing groundwater and surface water regime.

- These modifications may also have a direct or indirect changes in the surface and near-surface water resources of the Sydney Water catchment that must be considered. Far-field impacts and/or regional groundwater impacts on streams and swamps in the Angus Place West project area are possible and should be assessed.

- Due to a probable lowering of the near-surface groundwater aquifers, the mine water pumping proposed by the Angus Place modification 8 may impact on nationally endangered species such as Swamp Everlasting, *Grevillea acanthifolia*, *Gentianella cunninghamii*, *Prasophyllum australe*, Latham's Snipe and nationally endangered Temperate Highland Peat Swamps on Sandstone in the Angus Place West project area. These impacts must be assessed.

The modifications are likely to impact on water resources of a drinking water catchment, a World Heritage Area and nationally endangered plants and communities. Modification 8 Angus Place and Modification 5 Western Coal Services should be controlled actions under the EPBC Act.

**Centennial’s track record of environmental damage**

Centennial has failed to demonstrate that it can operate responsibly in the Gardens of Stone region without causing irreversible damage to the environment. Records of environmental incidents and harm, consent and licence non-compliances, and inaccurate predictions of environmental impacts from its operations suggest that current impact predictions in the environmental assessment for these modifications should not be relied upon.

An audit of Centennial’s mining licences for the past five years has found at least 134 licence non-compliances across its sites in the Gardens of Stone region. Centennial's non-compliance events in the region include:

- In 2022, Centennial breached its development consent for Airly mine causing major irreversible fractures to million-year-old sandstone pagoda formations in the Mugii Murum-ban State Conservation Area. The Department of Planning and Environment imposed a $150,000 enforceable undertaking on Centennial. The company has since mined outside its approved area at Airly Mine, which is a class 1 reportable offence under NSW *Environmental Planning and Assessment Act*.

- In 2017, the EPA prosecuted Centennial after its coal waste storage at Clarence mine spilt 2330 tonnes of coal fines into the Wollangambe River and caused damage within the Blue Mountains World Heritage Area, and Centennial was fined over $1 million and clean-up operations took 12 months.

- In 2015, Centennial was fined $15,000 when toxic coal sludge was illegally discharged from Springvale mine sediment storage ponds into downstream wetlands.

- In 2011, Centennial acknowledged that the Federal Environment Minister considered its mining activities to have had a significant impact on Temperate Highland Peat Swamps on Sandstone, namely Narrow Swamp, East Wolgan Swamp and Junction Swamp and entered a $1.45 million enforceable undertaking with the Commonwealth under s 486DA of the EPBC Act. These swamps have not recovered and are expected to be permanently lost.

**Additional Water Treatment required**

If the capacity or capability of the 42ML/day Springvale Water Treatment Plant has been exceeded and it cannot treat an additional 10ML/day of mine water from Angus Place Mine, then an additional water treatment plant (or existing plant capacity) is required. This is a large amount of additional mine water and the entire Angus Place and Springvale mine water matter requires thorough scrutiny by expert panels, such as the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development and the Independent Expert Advisory Panel on Underground Mining, as well as the Independent Planning Commission.

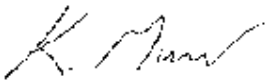
Centennial Coal should withdraw proposed modification 8 Angus Place and proposed modification 5 Western Coal Services. Centennial Coal should at least be required to install a reverse osmosis treatment plant, as it did under Angus Place modification 5, and then pump the brine effluent to Springvale Water Treatment Plant site for processing and appropriate disposal. This installation of extra capacity is not a matter for a future modification proposal. Centennial Coal should have planned for the extra plant.

Any proposal for additional water treatment capacity at Angus Place Mine should be made as part of the major project for Angus Place West. Discharges from a reverse osmosis treatment plant at Angus Place should have a salinity of 30µS/cm to have a neutral effect on the salinity of the Coxs River headwaters that would receive this discharge.

These modification proposals should both be refused consent as they are not in the interest of Sydney water consumers, citizens who care for the protection and proper management of our national heritage and those who uphold due process and accountability of planning processes.

Thank you for the opportunity to comment.

Yours sincerely,



Keith Muir
Hon. Project Officer
Wilderness Australia

*Australian Foundation for Wilderness Limited. ACN 001 112 143 ABN 84 001 112 143*
*Advocating as Wilderness Australia. Formerly The Colong Foundation for Wilderness Ltd.*
*PO Box K335, Haymarket, 1240, NSW. Registered Office 10/154 Elizabeth Street Sydney NSW 2000.*
*Telephone (02) 9261 2400*
*www.wildernessaustralia.org.au*
*contact@wildernessaustralia.org.au*