

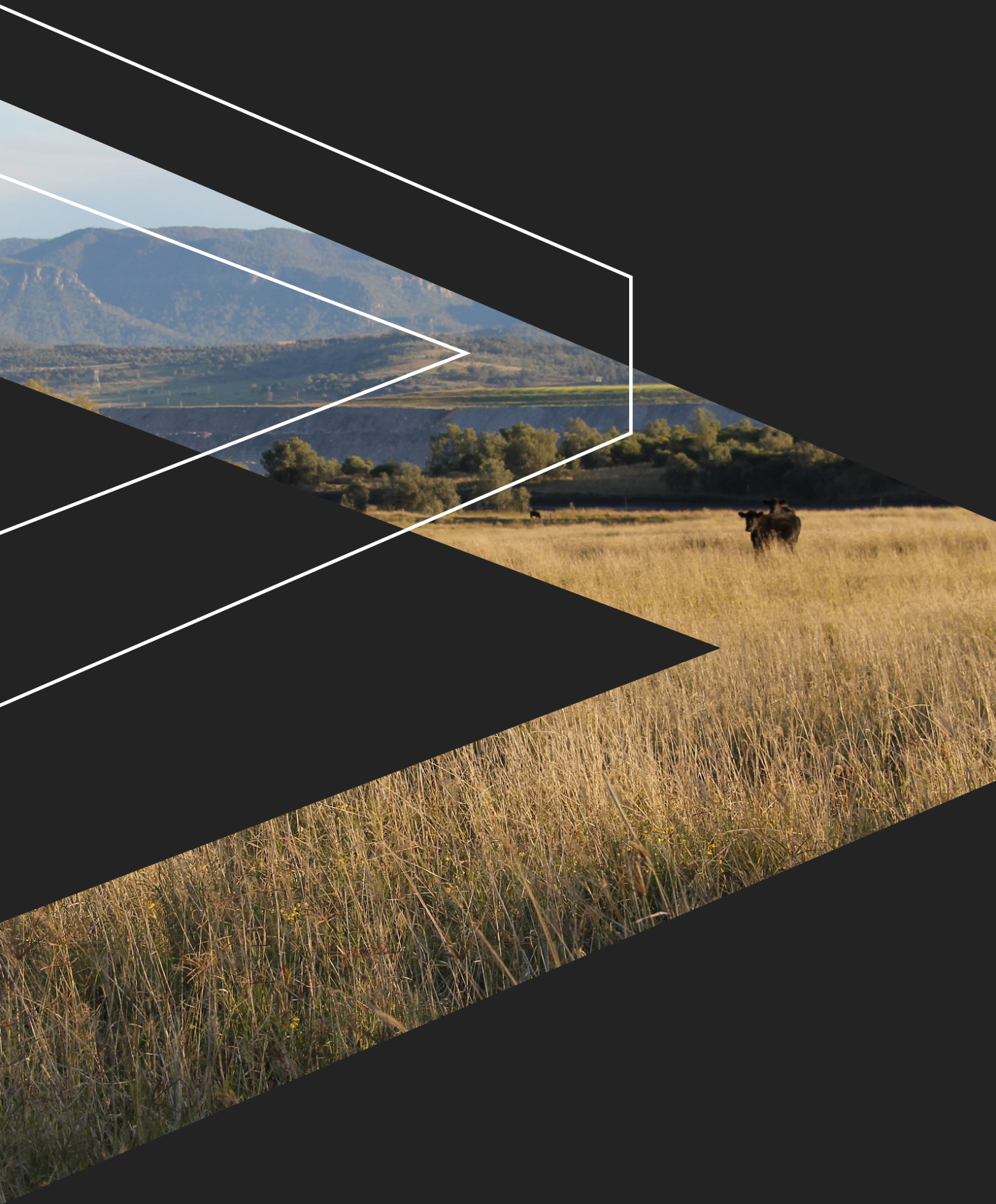


**HUNTER VALLEY
OPERATIONS**

HUNTER VALLEY OPERATIONS CONTINUATION PROJECT SUMMARY BOOKLET

January 2023





Contents

INTRODUCTION	4
WHAT ARE WE PROPOSING	5
BENEFITS OF THE PROJECT	7
STAKEHOLDER ENGAGEMENT	10
ENVIRONMENTAL & SOCIAL IMPACTS	11
Air Quality	12
Noise	14
Blasting	16
Greenhouse Gas	17
Water Resources and Aquatic Ecology	18
Biodiversity	20
Historic Heritage	21
Aboriginal Cultural Heritage	22
Agriculture, Soil and Land Resources	24
Rehabilitation and Mine Closure	26
Traffic and Transport	28
Visual Amenity	30
Economic Impact Assessment	31
Social Impact Assessment	32
ASSESSMENT PROCESS	34



WHO AND WHERE IS HUNTER VALLEY OPERATIONS (HVO)?

Hunter Valley Operations (HVO) is an existing multi-pit open cut coal mining complex, comprising two mine sites separated by the Hunter River, HVO North and HVO South. HVO is 24 kilometres (km) northwest of Singleton in the NSW Hunter Valley.

The complex produces high quality thermal coal and metallurgical coal suitable for use in international and domestic markets.

It has been operating for more than 70 years. Jointly owned by Yancoal and Glencore, HVO is independently managed through a Joint Venture Committee.

The HVO Continuation Project will support local jobs, the local economy and community by extending the life of Hunter Valley Operations to 2050.

WHAT ARE WE PROPOSING?

Hunter Valley Operations (HVO) is seeking approval to extend the life of its two Hunter Valley mines. Under the proposal, HVO North will continue to 2050 (from 2025) and HVO South to 2045 (from 2030).

We plan to extract more coal, largely from already mined areas, by essentially mining deeper seams. There will be little change to the scale or intensity of mining and no increase to approved annual production rates.

At HVO North, the disturbance area between Mitchell and Carrington pits will extend and we will mine deeper through the Carrington area. At HVO South, the annual extraction rate will reduce, and some areas approved for mining will now remain undisturbed.

To continue to mine efficiently, we'll relocate some electricity and telecommunication infrastructure and upgrade and extend some mine processing and train loading facilities.

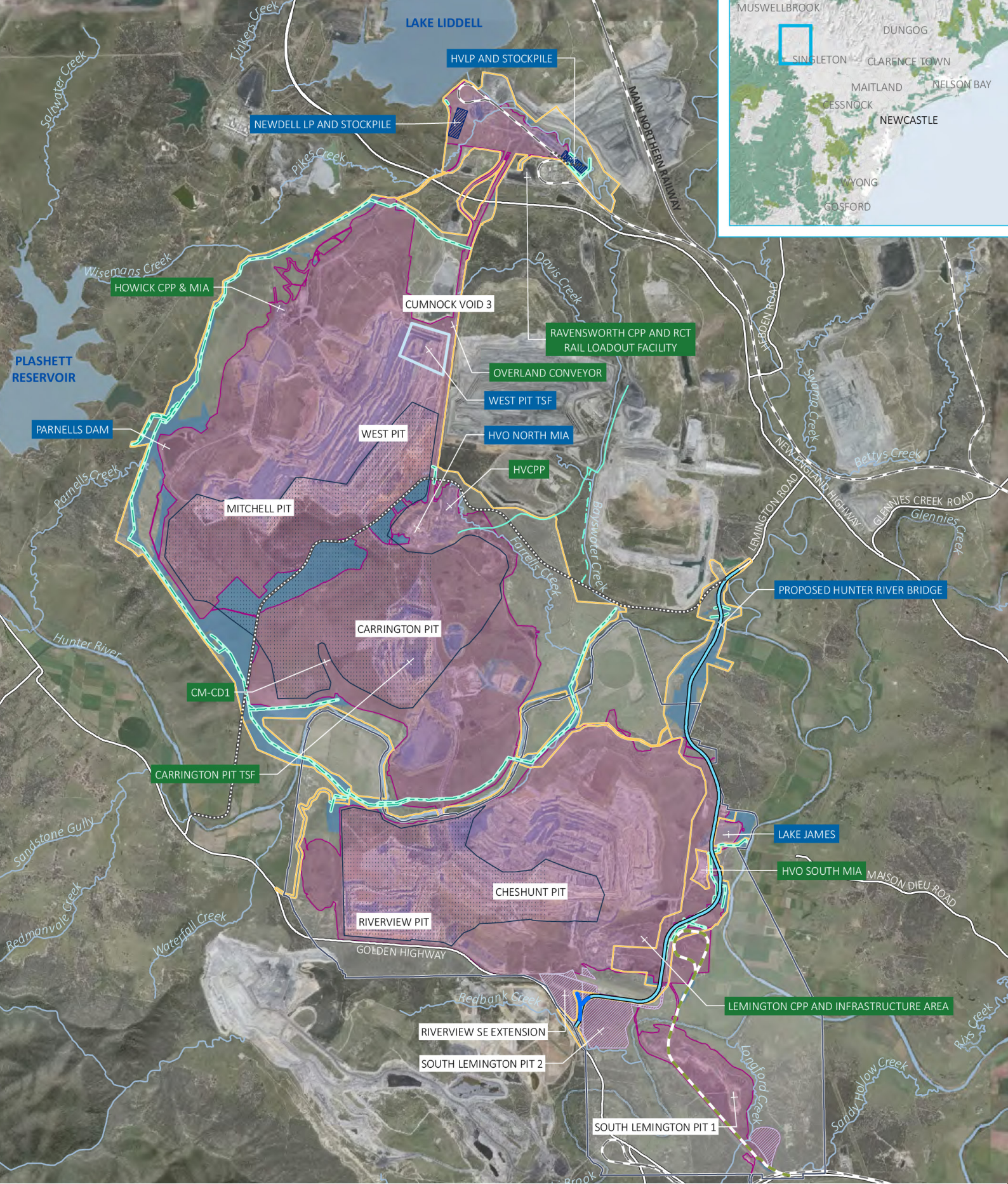
We'll realign Lemington Road from near the New England Highway to Comleroi Road. A new bridge over the Hunter River will replace the flood prone Moses Crossing giving road users faster, more reliable, time saving, wet weather access.

KEY FACTS

- > This is not a new mine. Coal has been mined onsite for more than 70 years.
- > There'll be little change to the scale or intensity of mining and no increase to approved annual production rates.
- > Our high-quality coal is in demand by other countries to meet their short to medium term energy needs.
- > The proposal is in line with the NSW Government's Strategic Statement on Coal Exploration and Mining in NSW which recognises the importance of coal production to NSW and its regional communities.



VISIT THE CONTINUATION PROJECT PAGE
[HVO.COM.AU/CONTINUATION](https://hvo.com.au/continuation)



KEY

- HVO North proposed development consent boundary

HVO South proposed development consent boundary

Existing and approved disturbance area

Previously approved area not retained

Project related item

Existing item
- Proposed HVO Continuation Project elements**

Lemington Road realignment

Indicative location of public road closure

Haul route to Ravensworth Operations

Transmission line relocation

Alternative Golden Highway intersection
- Proposed mining area

Product stockpile

Additional disturbance area

Existing HVO elements to be maintained

South Lemington Rail Loop (approved, not yet constructed)



BENEFITS

The HVO Continuation Project will support local jobs, the local economy and community.



Ongoing employment opportunities for around 1500 people plus 600 temporary construction jobs during infrastructure upgrades.



Continued support for businesses through HVO buying goods and services and from its workforce spending wages. HVO works with 700 suppliers, many of them local.



Continued community support through HVO community grants, workplace giving, sponsorships, and other charity support.



Continued support for communities and infrastructure through taxes, royalties, and other government payments. These payments help build schools, roads and hospitals and fund the wages of teachers, nurses and Police.



A realigned Lemington Road and a new bridge replacing the often flooded Moses Crossing to give road users a safer, more reliable and time saving route in wet weather.



Improvements on the currently approved final site rehabilitation using natural landform design principles. The number of final voids will reduce from four to two.



IT IS NOT JUST ABOUT MINING, IT IS ABOUT PEOPLE

MEET KRISTY

Kristy is from a family with a long history of miners. She has worked for HVO for three years. Her son now works for HVO too in the blast crew. She can see how working at HVO has helped him to blossom, and to see the friendships he has made. She says mining benefits the community in many ways, not just the people who work in the mines. “It is quite special what I get to do,” Kristy says.



WATCH KRISTY’S VIDEO
HVO.COM.AU/VIDEOS



MEET IAN AND NATHAN

Father and son, Ian and Nathan, both work at HVO. Nathan works in maintenance and Ian works in production. Ian is pleased to see his son doing well in his chosen profession. Nathan says he appreciates the opportunities mining brings to support his lifestyle and family. He says there is also benefit to his community through all the businesses HVO supports.



WATCH IAN AND NATHAN’S VIDEO
HVO.COM.AU/VIDEOS



IT IS NOT JUST ABOUT MINING, IT IS ABOUT BUSINESS SUPPORT

Programmed, MTEC and ProMine are three of the more than 700 suppliers that HVO supports.

Programmed provides supplementary labour to HVO and other businesses. It has placed more than 1,200 trainees with HVO. The traineeships represent permanent employment so there are ongoing benefits to those people. Richard was 44 when he recently started his traineeship. “It’s the best thing I’ve ever done,” Richard says. General manager, Joel, says HVO has enabled his business to grow dramatically over the years and supported more staff in the Singleton office.

The managing director of ProMine Contracting says an extension of HVO’s mining life will benefit his business and all the people that work within it. He has been working with HVO for three years. His business has grown from three to 57 employees. Three quarters of his staff work and live in Singleton and Muswellbrook and the rest come from Newcastle and Lake Macquarie.

Since 2011, MTEC has grown from two employees to more than 100. Managing Director, Brad, says “without our partnership with HVO we couldn’t have grown and support the people in our business.”



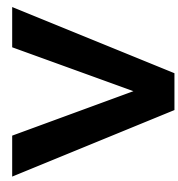
WATCH THE
PROGRAMMED VIDEO
HVO.COM.AU/VIDEOS



WATCH THE
PROMINE VIDEO
HVO.COM.AU/VIDEOS



WATCH THE
MTEC VIDEO
HVO.COM.AU/VIDEOS



STAKEHOLDER AND COMMUNITY ENGAGEMENT

Community members and stakeholders have been consulted at every step. We are thankful for the feedback which has helped to design and refine the proposal and our plans to minimise and manage social and environmental impacts.

We used a variety of tools to provide information and gather feedback consistent with the *State Significant Development Engagement Guidelines 2021*, *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and the Secretary's Environmental Assessment Requirements (SEARs) issued by NSW Department of Planning and Environment.

- Project newsletters for the local community
- Community information sessions in Jerrys Plains, Maison Dieu and Long Point
- Other community and stakeholder meetings
- Consultation with HVO's Community Consultative Committee
- Information on HVO websites
- Consultation with 33 Registered Aboriginal Parties
- Responding to email and phone enquiries.

We're consulting directly with neighbouring residents on specific measures to minimise any identified impacts on them.



MINIMISING AND MANAGING ENVIRONMENTAL AND SOCIAL IMPACTS

Our proposal to continue mining has been developed with careful planning over several years. We carried out detailed concept and pre-feasibility studies, which included an evaluation of potential environmental, social and economic impacts, to inform the final mine design. We also undertook a detailed review of the Mine Plan options and infrastructure avoidance assessments to minimise potential impacts.

EMM Consulting has prepared an **Environmental Impact Statement (EIS)** to address the Secretary's Environmental Assessment Requirements (issued by the NSW Government in accordance with State Significant Development Guidelines).

The EIS includes the findings of numerous technical and environmental investigations that identify measures to address impacts as well as an **Economic Impact Assessment** by Ernst and Young (EY). A **Social Impact Assessment** has identified potential impacts and benefits in accordance with the Social Impact Assessment Guideline for State Significant Projects.

On the following pages is a summary of the EIS study findings on the following impacts and how HVO will minimise and manage these impacts.

- Air quality
- Greenhouse gas
- Noise
- Blasting
- Water resources and aquatic ecology
- Biodiversity
- Aboriginal cultural heritage
- Historic heritage
- Agriculture, soil and land resources
- Traffic and transport
- Visual amenity
- Rehabilitation and closure
- Social and Economic

AIR QUALITY

See Chapter 8 of the EIS

An Air Quality Assessment used various inputs including emission sources at various mine plan stages and production rates, meteorological data, information on neighbouring mining operations and background air quality data.

It compared the results to the relevant assessment criteria to conclude that HVO will comply with cumulative annual average PM_{10} and $PM_{2.5}$ air quality criteria aside from properties that are already subject to voluntary acquisition rights and two additional properties. These property owners are

expected to be offered voluntary acquisition rights in accordance with the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments* (VLAMP).

The Assessment predicts no exceedance of the VLAMP's applicable incremental 24-hr average PM_{10} and $PM_{2.5}$, total suspended particles or depositional dust criteria at any privately owned residence.

HOW WILL HVO MANAGE AIR QUALITY?

Update and use our Air Quality and Greenhouse Gas Management Plan to implement best practice air quality management measures including:

- a review of existing air quality monitoring locations to provide adequate coverage – particularly in areas predicted to have a potential increased air quality risk
- forecasts of expected dust risk communicated at daily operational meetings
- monitoring and assessing potential dust issues through cameras and visual observations, analysing weather conditions, and air quality monitoring data
- modifying mining activities to minimise or avoid potential dust impacts during adverse conditions.

Extend and expand our near neighbour amenity resource program to provide tank inspections, tank cleaning and installation of first flush filter systems for residential water tanks and domestic taps to any private residence within 4km of our proposed mining area.



HVO monitors dust and noise station alerts and adjusts its operations accordingly.

NOISE

See Chapter 10 of the EIS

The Project design is informed by a Noise Assessment that considered all reasonable and feasible mitigation measures to minimise noise impacts in accordance with the *NSW Government’s Noise Policy for Industry* (NPfI).

These measures include continued fitting of noise suppressing equipment to the existing mining fleet, an alternative haul route design, avoidance of some mining areas such as Mitchell North West, construction of a roadside bund on the exposed side of the haul road from Mitchell Pit towards the Howick Coal Preparation Plant, and equipment shutdowns during adverse meteorological conditions.

The Noise Assessment predicts that by adopting these noise controls:

- no properties will experience significant noise impact above relevant criteria
- six properties on the outskirts of Jerrys Plains will be entitled to voluntary mitigation rights due to predicted exceedances of criteria
- 13 properties will have their noise mitigation rights extended
- seven properties will no longer experience noise levels that trigger mitigation rights but HVO proposes to retain their rights.

It predicts little traffic noise impacts during operation or construction of infrastructure upgrades.

HOW WILL HVO MANAGE NOISE?

- Update our Noise Management Plan and continue to monitor, including in real time, and minimise noise impacts in line with NSW Government policy.
- Build an 8 metre high and 900 metre long noise protection barrier on the exposed side of the haul road from the HVO North Mitchell Pit towards the Howick Coal Preparation Plant.
- Review our real-time and attended noise compliance monitoring locations to ensure the network provides adequate coverage.
- Continue to adjust operations if noise levels are above criteria or if there are weather and other factors that can enhance noise impacts.
- Continue to fit sound suppressing equipment to existing plant and equipment and invest in equipment that generates lower noise levels.
- When building new infrastructure and facilities, include cladding and other best available technology to reduce noise.



DID YOU KNOW? MANAGING NOISE & DUST

Our workforce and their friends and families live in surrounding communities, so they understand the importance of managing dust and noise impacts. We use a network of monitoring stations to provide real time air quality, noise, and meteorological data.

Some monitoring stations generate alarms before threshold levels are reached. This enables us to modify our operations to minimise impacts during adverse conditions. Some of the ways we operate or modify operations to minimise noise and dust include:

- rearranging fleet types and reducing fleet numbers
- changing haul routes and dump locations
- adjusting or shutting down tasks or a mining work area
- rehabilitating mined land as soon as possible to reduce exposed areas

- restricting topsoil removal to retain ground moisture
- restricting overburden dumping in dust sensitive areas
- minimising tip heights
- automatic water spraying at our hoppers when haul trucks dump their loads
- covering coal conveyors, keeping stockpiles damp and dampening haul routes
- fitting heavy machinery with sound suppressing equipment
- using quieter equipment in noise sensitive areas
- enclosing coal processing areas
- educating our workforce about minimising dust and noise when operating heavy machinery – e.g. touch loading of trucks to reduce loud bangs on impact.

BLASTING

See Chapter 11 of the EIS

Blasting impacts were assessed at locations such as private residences at Maison Dieu and Jerrys Plains, heritage items, public infrastructure and representative livestock and the equine industry properties in Jerrys Plains.

The Blasting Assessment found that exposure to vibration and airblast overpressure can continue to be managed using blast management measures such as reduced charge masses.

Blasting will not be any closer to the private land than already approved. It will only occur Monday to Saturday between 7am and 6pm.

No blasting will take place on Sundays or public holidays and the maximum number of blasts will remain at currently approved levels.

HOW WILL HVO MANAGE BLASTING?

- Continue to use our well-established pre-blast assessment protocol, blast monitoring system and weather monitoring systems.
- Continue to update our Blasting Management Plan to use best practice protocols including reduced charge masses and other ground vibration and overpressure level control measures.
- Install four additional blast monitors.
- Continue to post our blasting schedule on our website and operate our 24/7 blasting information line and our SMS blast notification service.



SCAN FOR THE HVO BLASTING SCHEDULE
HVO.COM.AU/CONTACT

GREENHOUSE GAS (GHG)

See Chapter 9 of the EIS

The plan to continue mining incorporates measures to maximise energy efficiency and minimise greenhouse gas (GHG) emissions. We are already investing significantly in more efficient, lower emitting equipment. The EIS studies quantify predicted greenhouse gas emissions including the Scope 1, 2 and 3 emissions.

The estimated annual average Scope 1 and 2 emissions from the mine's continuation to 2050 will represent approximately 0.25% of Australia's 2020 emissions and 0.0025% of global emissions.

Our high quality thermal coal is suitable for high efficiency power generation. If it is not available, markets may turn to lower quality thermal coal or brown coal which produces higher GHG emissions.

HVO, including this Continuation Project, will be subject to the requirements of the Federal Government's proposed Safeguard Mechanism.

It will have a declining emissions baseline and will need to comply with other elements of the Safeguard Mechanism reforms, which form part of the Government's measures to achieve the national emission reduction target of 43% by 2030. We will introduce measures such as new technology and further efficiencies in line with the Safeguard Mechanism reforms.

HOW WILL HVO MANAGE GREENHOUSE GAS?

- Continue to look to use new, economically feasible, technologies to improve efficiencies and reduce emissions including fuel switching and electricity from renewable sources.
- Update our 3-year plan every three years for investigating and implementing all reasonable and feasible measures to minimise GHG emissions.
- Continue to implement operational control efficiencies such as minimising haul distances, and optimising ramp gradients, payload management and scheduling activities to optimise equipment use.
- Continue to report GHG emissions under the *National Greenhouse and Energy Reporting Act 2007* as well as other government initiatives to manage emissions at a national level.

WATER RESOURCES AND AQUATIC ECOLOGY

See Chapter 12 & See Chapter 14 of the EIS

Groundwater, surface water and other assessments show we can continue to mine within the requirements of the water regulatory framework. The assessments show:

- HVO has sufficient water entitlements to continue mining to 2050
- minimal to no changes to the annual flow and average duration of dry periods for the Hunter River and most of its tributaries
- no significant adverse impacts on the water quality of the Hunter River
- no significant changes to flooding at third-party owned dwellings along the Hunter River
- no impact on the use of the land (grazing and cropping or crown land)
- incremental effects on groundwater will be minor – there will be less groundwater drawdown in Wollombi Brook than now
- no impact at third-party groundwater bores
- no predicted impacts on the aquatic ecology of the Hunter River
- minor impacts on stygofauna due to drawdown in the Hunter River.



HOW WILL HVO MANAGE WATER RESOURCES AND AQUATIC ECOLOGY?

HVO has been operating for decades near the Hunter River and Wollombi Brook. Our mining activities have been extensively studied, so we have a good understanding of effective measures to manage our impacts on water.

- Continue to manage water through an updated Water Management Plan and relevant licence requirements which requires us to have all water licences in place prior to water take.
- Improvements to water management infrastructure with upgrades to mine water storages (Parnells Dam and Lake James), new flood protection levees and new clean water drainage systems.
- Construct a low permeability barrier wall in the Carrington West Wing area - after mining that area and prior to backfilling - to minimise seepage. Piezometers will monitor for changes in salinity and pressure.
- When the mine closes, we'll decommission the Carrington West Wing levee to reinstate floodplain storage in this area.
- Additional groundwater monitoring bores.
- Surface water quality analysis will increase to six monthly instead of annually.

BIODIVERSITY

See Chapter 13 of the EIS

The landscape within and surrounding HVO has had extensive historical clearing for agricultural, mining and rural development. A Biodiversity Development Assessment was carried out in accordance with the *Biodiversity Conservation Act 2016* to identify potential impacts on biodiversity values, and offsetting requirements to mitigate residual impacts following the implementation of all feasible and reasonable avoidance and minimisation measures.

Changes to the mining and infrastructure upgrade options during the planning and design phase have significantly reduced impacts on a range of sensitive biodiversity features. Removal of some previously approved but not yet disturbed mining areas will result in the avoidance of approximately 87 ha of

the Central Hunter Grey Box – Ironbark Woodland Endangered Ecological Community (EEC) and smaller areas of other high value vegetation.

A Biodiversity Offset Strategy will compensate for the unavoidable loss of up to 397 ha of native vegetation that will still occur after implementing avoidance and minimisation strategies. An offset site near South Lemington Pit 1 at HVO South is proposed to offset impacts to Warkworth Sands Woodland EEC. This site, along with proposed restoration measures, provides ecosystem credit requirements for the entire Warkworth Sands Woodland EEC.

HOW WILL HVO MANAGE BIODIVERSITY?

- Develop a Biodiversity Offset Strategy, in consultation with government agencies, to deliver a net beneficial outcome for biodiversity values.
- Design the mine plan and the Lemington Road and transmission line realignments to avoid larger areas of Warkworth Sands Woodland, and Central Hunter Grey Box – Ironbark Woodland EECs and other high value vegetation areas.
- Continue monitoring River Red Gum health and implementing measures to protect trees within the River Red Gum Additional Disturbance Area.
- Continue our pest and weed management program – in conjunction with other mines and landholders – to protect and preserve native flora and fauna.

HISTORIC HERITAGE

See Chapter 16 of the EIS

A Historic Heritage Assessment identified items with historic heritage values. Only one - some remnant stockyards - will be directly impacted. We will undertake archival recording prior to disturbance.

HOW WILL HVO MANAGE HISTORIC HERITAGE?

- Prepare a Historic Heritage Management Plan to assess the significance of historic heritage items identified in the historic heritage study area and detail measures and guidelines to protect and conserve each item.
- When realigning transmission lines, we'll ensure no direct impacts to the remnant foundations identified in proximity to the proposed alignment.
- Prepare an assessment of significance for the Great Lodge and continue to monitor and assess this heritage item.
- Install additional blast monitors at heritage items.

PRESERVING ARCHERFIELD HOMESTEAD AND OUTBUILDINGS

HVO continues to help preserve the historic Federation-style Archerfield homestead and outbuildings. This homestead won't be impacted by the Project.

In 2022, HVO removed silky oaks and other problem trees and vegetation close to two outbuildings.

We are now doing structural repair and preservation of one outbuilding using locally sourced Ironbark timber to match the original structure. Work is also being planned for the second outbuilding.



ABORIGINAL CULTURAL HERITAGE

See Chapter 15 of the EIS

A comprehensive Aboriginal Cultural Heritage Assessment (ACHA) has been completed in consultation with 33 Registered Aboriginal Parties (RAPs). The assessment process included consultation meetings, cultural values workshops, interviews, walks on country as part of cultural values mapping, an archaeological survey, test excavation programs and specialist scarred tree assessments.

The Aboriginal cultural heritage site known as Carrington Mine - Colluvial Deposit 1 (CM-CD1) was identified to be of high cultural significance. In consultation with RAPs, we have removed the area from the Project footprint and final mine plan.

We've developed other impact management and mitigation measures in consultation with RAPs involved in the assessment. Of the sites identified in the disturbance area:

- 84 (28%) will be avoided
- 198 (65%) will be collected via surface collection
- 19 (6%) will involve surface collection and salvage excavation
- one (<1%) will be salvaged via salvage excavation
- the scarred portions of two scarred trees (<1%) will be salvaged and relocated.

The majority (84%) of identified extant sites were found to be of low scientific significance.



HOW WILL HVO MANAGE ABORIGINAL CULTURAL HERITAGE?

- A new consolidated Aboriginal Cultural Heritage Management Plan – developed in consultation with RAPs and Heritage NSW - will manage the 304 identified Aboriginal sites.
- We'll avoid the Aboriginal cultural heritage site CM-CD1.
- Further Lemington Road realignment design work to exhaust possibility of avoiding impact to identified scarred trees.
- After consulting RAPs, we've committed to meaningful social mitigation of Aboriginal cultural heritage impacts by developing a funding framework to enable projects that align with Closing the Gap initiatives, including job readiness programs, assistance relating to tendering for work at HVO by Aboriginal suppliers, and a commitment of \$1 million over 10 years.

AGRICULTURE, SOIL AND LAND RESOURCES

See Chapter 17 and 18 of the EIS

Our mine has successfully co-existed with and supported agriculture for years. Generally, land we are not using for mining is made available for agriculture.

HVO currently has around 6,000 hectares of buffer and rehabilitated lands which is used for dairy, cattle grazing or pasture.

There are around 2,000 head of dairy and beef cattle on HVO land.

No significant impacts on surrounding private agricultural land are predicted from continued mining. Our proposed conceptual final landform will return more land for agriculture.

HOW WILL HVO MANAGE AGRICULTURE, SOIL AND LAND RESOURCES?

- Continue to rehabilitate and return land no longer used for mining back to agriculture.
- Use alternate growth medium enhancement strategies to maximise soil resources available for rehabilitation.

HVO’S PARTNERSHIP WITH AGRICULTURE

PETER’S STORY

Peter Nichols is one of seven licencees farming HVO land. He knows you can farm land after mining and produce the yields you got from the land before it was mined. He’s been farming Hunter Valley Operations’ (HVO) land for more than 20 years. In trials, rehabilitated HVO mining land outyielded neighbouring non-mined land in terms of kilograms per head of cattle.

“We are lucky to be involved here at HVO. HVO has helped us quite a bit. They are good people to work with,” Peter says.

Initially, it was lucerne but now it’s oats and rye that are the winter crops for his Angus stud.

“We don’t overstock...which prevents weeds and erosion. As you can see, we have good grass cover.”

He agrees that his business is a perfect example of how mining and agriculture can not only co-exist but work together to mutually benefit one another.

WATCH PETER’S VIDEO HERE
[HVO.COM.AU/VIDEOS](https://hvo.com.au/videos)



REHABILITATION AND MINE CLOSURE

See Chapter 21 of the EIS

The proposal for continued mining offers improvements on current approved plans for rehabilitation by incorporating natural landform design principles.

The total number of voids will reduce from four to two. Both final voids will remain as long term pit lakes (groundwater sinks).

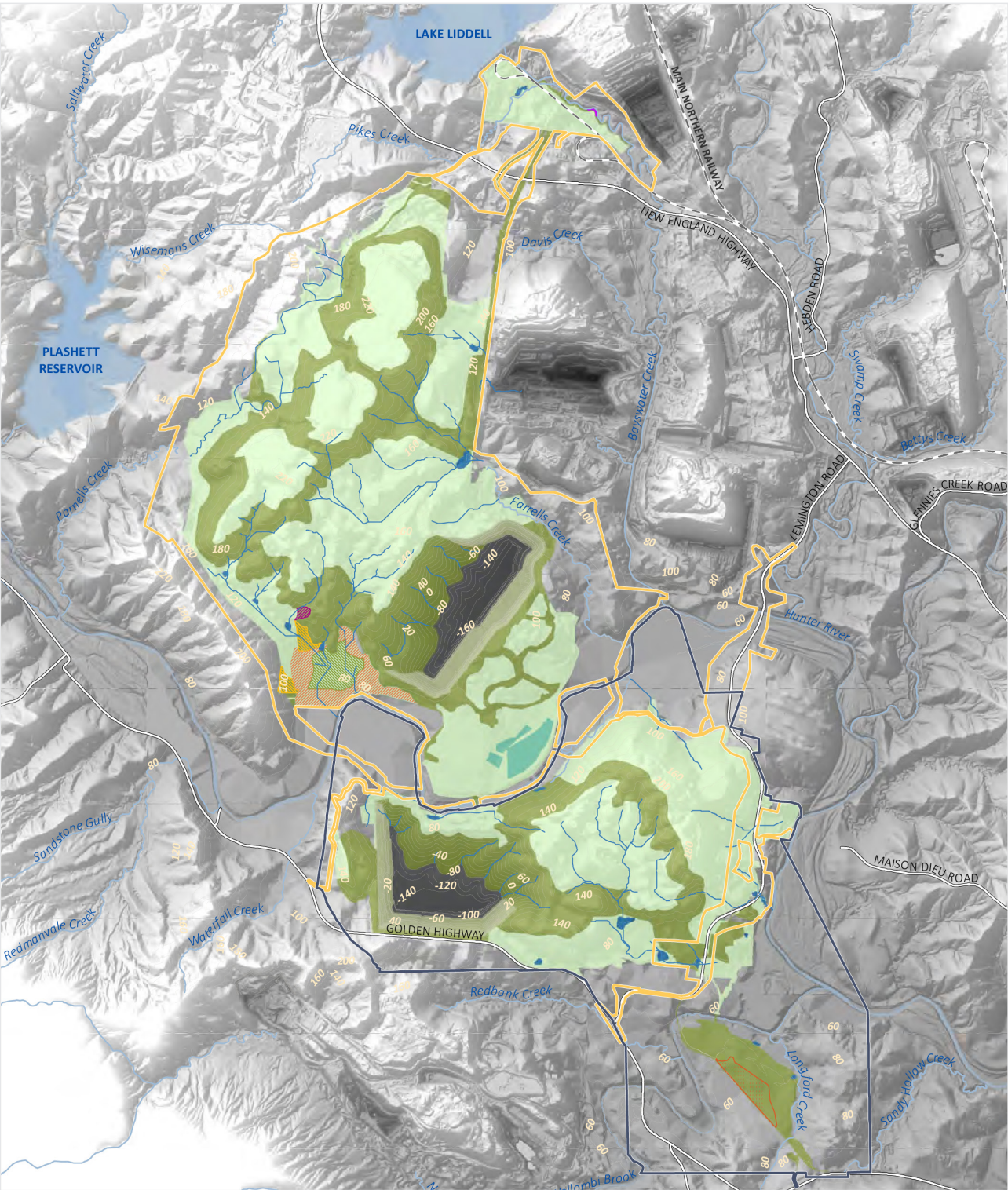
We continually rehabilitate and maintain areas that we have finished mining with for both native vegetation and grazing land. A native woodland seed mix of locally-sourced plant species is used for areas to create a habitat for local fauna. A pasture and light woodland mix, suitable for grazing, is used for areas returned to agriculture.

HOW WILL HVO MANAGE REHABILITATION AND MINE CLOSURE?

- Update our Rehabilitation Management Plan.
- Develop a detailed closure plan before we stop mining. Continue to rehabilitate land when it is no longer needed for mining. Continue trials and monitoring to get the best possible grazing and woodland areas.



FINAL LANDFORM



Our proposed conceptual improved landform includes land use domains such as woodland and riparian vegetation communities and agriculture (grazing).

TRAFFIC AND TRANSPORT

See Chapter 19 of the EIS

To continue mining efficiently we need to realign Lemington Road from near the New England Highway to Comleroi Road. A new bridge over the Hunter River will replace the current flood prone single lane Moses Crossing.

The new bridge will substantially improve the flood resilience of the road, providing more reliable access between the New England and Golden Highways for road users in wet weather.

Moses Crossing has been underwater for a combined total of more than 11 months since 2010, the majority of that in the last two years.

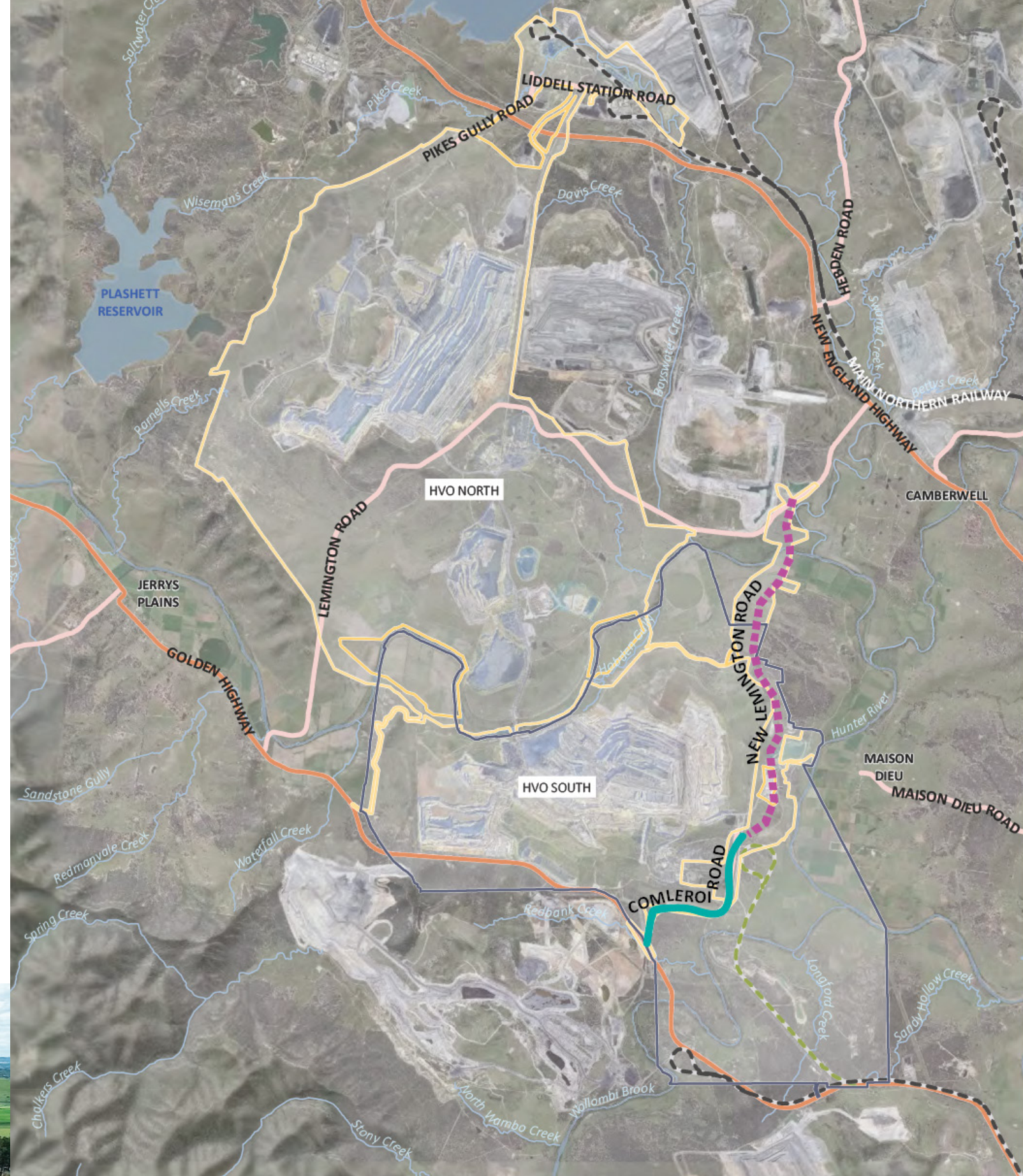
The proposed new bridge would have kept Lemington Road clear of flooding over that period.

Trips to and from the east of the Lemington Road and Golden Highway intersection will decrease by approximately 9 to 10 minutes. Trips to and from the west of the intersection will increase by 1½ to 2½ minutes.

With no change to approved workforce numbers, additional impacts on the road network will be minor. There will be some impact to traffic during construction requiring management of delivery trucks during the morning peak.

HOW WILL HVO MANAGE TRAFFIC AND TRANSPORT?

- Develop a Traffic Management Plan to minimise interruption to local roads during construction including minimising construction truck movements during peak periods.
- Complete the new portion of Lemington Road before the closure of the existing road.



KEY

-  Existing Comleroi Road
-  Proposed New Lemington Road

VISUAL AMENITY

See Chapter 20 of the EIS

Visual impacts of our existing mining operations have previously been assessed and approved. They are considered part of the existing environment. A Visual Impact Assessment includes a series of radial analyses and panoramic photographs for potentially impacted locations. There are private

properties and road corridors where HVO and other existing mining operations are visible. The assessment found that visual impact on these properties will not materially change.

HOW WILL HVO MANAGE VISUAL AMENITY?

- Maintain the ridge between Jerrys Plains and HVO North, which is an effective visual amenity barrier.
- Tree planting and other vegetation screening on parts of the realigned Lemington Road.
- If the Lemington Coal Preparation Plant and rail loop is required, we will incorporate the required additional screening.

ECONOMIC IMPACT ASSESSMENT

See Chapter 24 of the EIS

Ernst & Young (EY) undertook an Economic Impact Assessment (EIA) using the framework set out in the NSW Government’s guidelines for the economic assessment of mining and coal seam gas proposals. The EIA includes a Cost Benefit Analysis and a Local Effects Analysis.

A cost benefit analysis estimates a net benefit of \$4.8 billion in net present value (NPV) terms. This is after considering indirect costs related to greenhouse gas emissions, traffic and transport, biodiversity offset, loss of surplus to other industries (impact to agricultural lands) and mitigation offset.

DIRECT AND INDIRECT BENEFITS TO OTHERS IN NPV TERMS INCLUDE:

- > total corporate taxes of \$1.2 billion
- > other government revenue for NSW of \$1.7 billion – including from mining royalties, payroll tax and council rates
- > worker benefits of \$1 billion
- > supplier benefits of \$1.7 billion.

Continuing mining will also support around 1,500 ongoing jobs plus 600 temporary construction jobs during infrastructure upgrades. The estimated total net benefit from continuing mining is \$4.8 billion in net present value (NPV) terms.



SOCIAL IMPACT ASSESSMENT

See Chapter 23 of the EIS

A Social Impact Assessment (SIA) examined a local and regional study area. Assessment tools included data collected as part of the social baseline analysis, the outcomes of specialist technical reports and the outcomes from extensive community engagement with a variety of stakeholders.

Engagement activities included:

- in-depth interviews with the near neighbours and landholders, local community members, local government stakeholders and service providers
- online community, workforce and supplier surveys
- consultation with Aboriginal stakeholders.

The highest ranked social benefits included:

- the realignment of Lemington Road and new bridge (Very high)
- ongoing stability of the local population (Very high)
- continued royalty payments to the State Government (High)
- ongoing community grants and sponsorships (High)
- improved rehabilitation outcomes, future land use and ongoing land management (High)
- continued opportunities for local employment and training opportunities – construction and operation (High)

- continued procurement opportunities for local businesses (High)
- more time for transition planning (High).

The highest ranked social impacts identified relate to:

- dust, noise and vibration associated with ongoing operations (Medium)
- traffic congestion during construction activities (Medium)
- impact on community cohesion due to divergent opinions (Medium)
- continued anxiety about potential effects on water quality (Medium)
- land management and pest control (Medium).

Proposed measures to mitigate the potential social impacts include an expanded tank inspection and cleaning program for private residences.

Based on consultation with the Registered Aboriginal Parties (RAPs), we propose to develop a funding framework to enable projects that align with Closing the Gap initiatives, including job readiness programs, assistance relating to tendering for work at HVO by Aboriginal suppliers, and a commitment of \$1 million over 10 years.

These and other mitigation measures will be detailed in a new Social Impact Management Plan.



HVO has partnered with five local charities. Each charity has its colours painted on a new mining truck. It receives an annual donation based on the truck's haulage and other fundraising support throughout the year.

DID YOU KNOW?

HVO makes a significant contribution to the economy and community in the Upper Hunter and other parts of NSW. In 2021 HVO's direct economic contribution was \$862 million.

> **\$537m**
spent on goods & services

> **1500**
local jobs supported

> **4450**
flow on jobs



ASSESSMENT PROCESS

The NSW and Federal governments will assess our Project to determine if we can continue mining.

HAVE YOUR SAY

We thank the community and other stakeholders for their feedback so far and encourage people to continue to have their say during the EIS public exhibition period.

Our website – www.hvo.com.au/continuation - has copies of and links to documents as well as details on information sessions and other ways to have your say.

- 01 Conceptual Mine Plan Design
- 02 Commencement of Social and Environmental Studies
Lodgement of Scoping Report with DPE
- 03 Provision of Environmental Assessment Requirements
Lodgement of Referrals to the Federal Government
- 04 Refinement of Mine Plans and completion
of Environmental Impact Statement (EIS)
- 05 Lodgement of EIS for assessment
- 06 Public exhibition of the EIS
- 07 Review submissions and prepare report
- 08 Assessment and determination

COMMUNITY INVOLVEMENT EVERY STEP OF THE WAY



HUNTER VALLEY
OPERATIONS

**1011 Lemington Road,
Ravensworth NSW 2330**

**(02) 6570 0300
hvo.com.au**