Existing and proposed coal mining in the Surat Basin

(OGIA/21/CD02/V1)

A snapshot supporting the Surat Underground Water Impact Report 2021

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**Currently not with OGIA*

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Table of contents

Table of figures

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1 Preamble

This document provides contextual information about coal mining activities in the Surat Basin including production methods, rates and proposed production scheduling – as these development activities are stressors to groundwater systems. This information is then used in developing conceptual understanding of groundwater impact pathways (OGIA 2021a) and trends (OGIA 2021b) and to prepare an industry development scenario for input to the regional groundwater flow model (OGIA 2021c) for making predictions of impacts.

2 Mining methods in the Surat Basin

There are two primary coal mining methods: open-cut and underground mining. All existing and proposed coal mining operations in the Surat Basin are open-cut.

Open-cut mining involves physical removal of overburden for direct access to coal seams (Figure 2-1). An **open pit** is normally commenced through excavation of a small pit where the coal seams are accessible at a shallow depth. The open pit is then progressively developed (as a box cut) first along strike of the target formation, and then along the dip of the formation to access deeper coal seams. A typical open pit develops a series of benches as the depth of excavation increases.

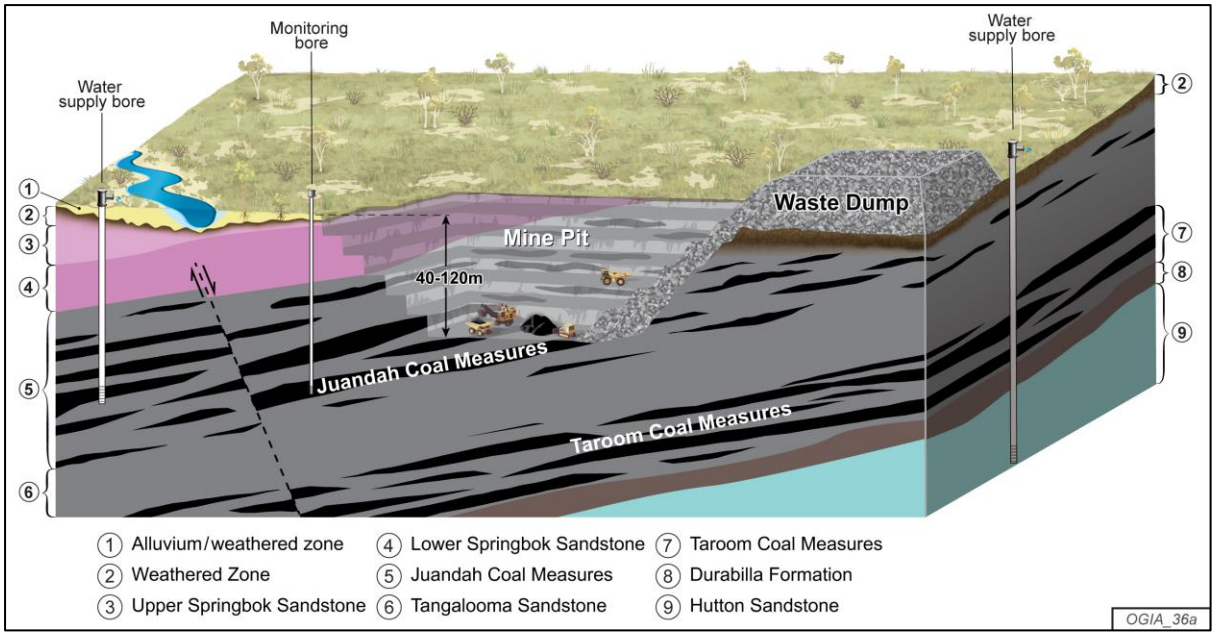

Figure 2-1: Schematic showing the typical profile of an open-cut coal mine at various stages of development

Open pits are often developed below the water table, which results in the lowering of the groundwater level adjacent to the pit and consequential groundwater seepage into the pit. Groundwater seepage collected in the open pit is initially diverted via drains into artificial in-pit sumps and then pumped out to the surface. Surface water and watercourses are diverted where necessary to avoid inflow of groundwater to the open pit during rain events. Rainfall and run-off that occurs within the open pit and pit catchment is usually directed to the in-pit sump.

This groundwater seepage and incidental rainfall must be removed for safe operation of the mine – a process referred to as **dewatering**. In other provinces outside the Surat Basin where higher groundwater inflows need to be controlled, more proactive systems are required, such as dedicated

dewatering bore fields or the inclusion of vertical barriers to prevent excess water entering in the mine void. In the Surat Basin, groundwater seepage to the open pits is low and hence only in-pit sump pumping is used to manage dewatering.

The active mining phase for an open pit usually ranges from 5 to 30 years. Waste rock, known as 'spoil' or 'overburden', is initially dumped 'out of pit' in waste rock dumps until a sufficient pit area has been excavated to enable in-pit dumping (Liang, Ren & Ningbo 2017). At the end of the mining operations, part of the open pit is left unfilled; this is usually referred to as the 'final void'. The shape and depth of the final void is based on several factors including the economics of material handling, surface hydrology, topography, depth to water table and other environmental influences.

3 Mining tenures

3.1 Tenure system

Authorities relating to the exploration and development of mines for the extraction of minerals and coal are managed through Queensland's *Mineral Resources Act 1989* (MR Act). The legislation allows overlapping tenures to be issued – for example, activities relating to coal development and CSG development – under the petroleum and gas legislation: the *Petroleum Act 1923*, the *Petroleum and Gas (Production and Safety) Act 2004* and the MR Act.

Exploration permits for coal (EPC) span five years and allow for the assessment of quantity and quality of coal resource. A mineral development licence (MDL) is granted to allow tenure holders to evaluate the development potential of the defined resource. An MDL can be granted if an EPC is held and there is a significant mineral occurrence with possible economic potential. MDLs also provide security of tenure over potential project areas while the licence holders evaluate the viability of commercial development.

A mining lease (ML) allows conducting larger-scale mining operations. An appropriate environmental authority (EA) is required before an ML can be granted. MLs are not restricted to maximum terms; rather, the terms are determined based on identified reserves and the projected life of the mines.

Tenure holders are required to provide summaries of the proposed work programs as part of their applications for mining authorities. For each year of a permit term, a general work program must also include a review of collected data, preparatory mapping, infrastructure construction and maintenance outline, description of any rehabilitation to be undertaken, and description of the workforce to undertake such activities.

3.2 Existing and proposed coal mines

In the Surat Basin, there are a total of eight existing and proposed coal mines (Figure 3-1), all of which are open-cut operations targeting coal seams associated with the Walloon Coal Measures (Juandah Coal Measures and Taroom Coal Measures). Four of these are operational mines – New Acland (Stages 1 and 2), Cameby Downs, Kogan Creek and Commodore – while another coal mine, Wilkie Creek, is currently closed. The three proposed coal mines are located in the northern part of the Surat Basin, near the town of Wandoan. Of these, the proposed Elimatta and Wandoan Coal Project mines both hold granted MLs and EAs, while the proposed The Range mine still requires some approvals before production could potentially commence.

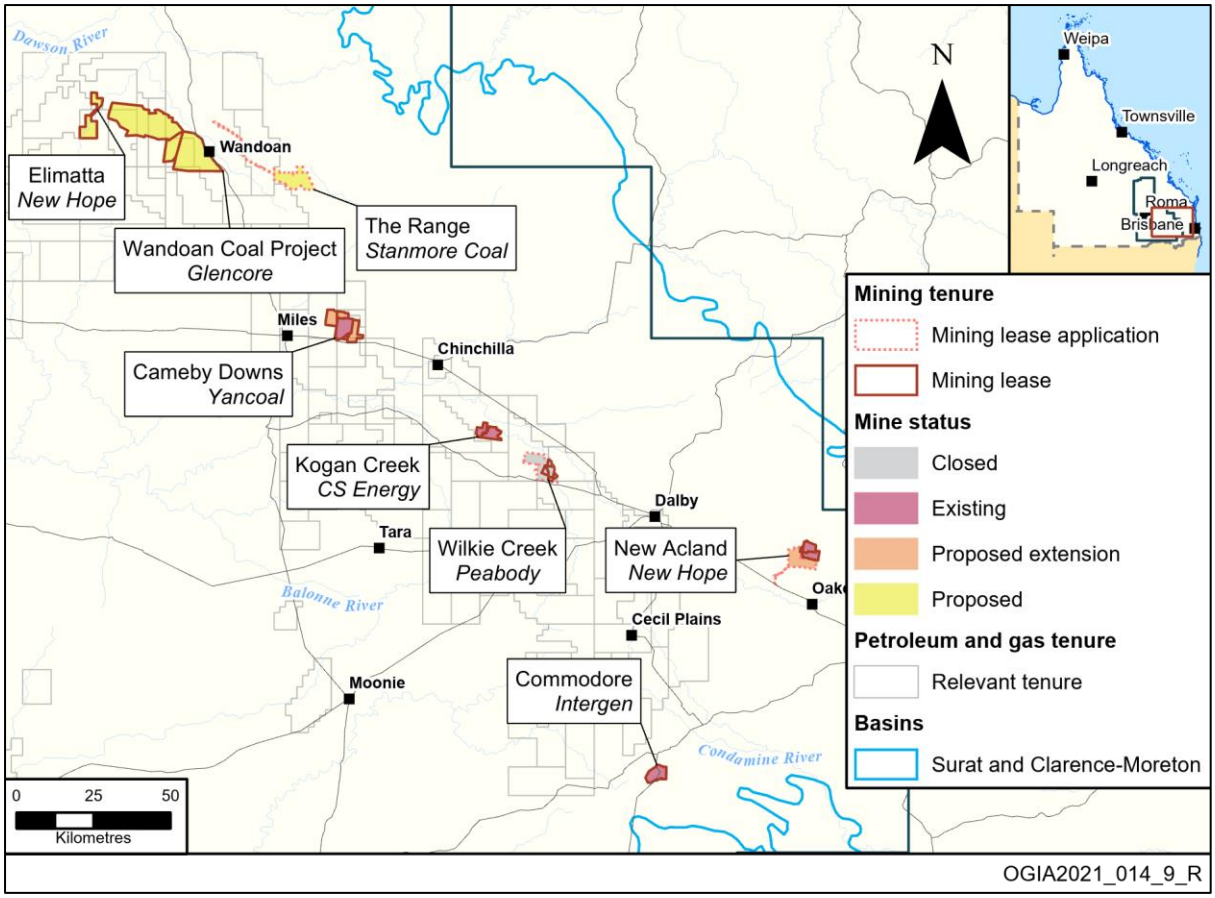

Figure 3-1: Location of coal mines in the Surat Basin

At the current level of development, coal mining in the Surat Basin is confined to those areas where the Walloon Coal Measures is within 100 metres of the ground surface. At these shallow depths, open-cut mining methods are employed to access and physically remove the coal for commercial purposes. Specific target coal seams for mining in the Surat Basin occur within the Juandah Coal Measures and Taroom Coal Measures, which form part of the Walloon Coal Measures. These are the same formations targeted for CSG extraction, although CSG development generally occurs at greater depths. Key attributes of the coal mines in the Surat Basin are summarised in Table A1-1 in Appendix 1.

3.3 Mine development scheduling

Under chapter 6 of the MR Act, the mine operator is required to provide an initial development plan (IDP) and then a later development plan (LDP) – an overview of mining activities for the term of the plan, consisting of a description of activity to occur, where it is to occur for each year of the plan, the rate of mining, the schedule of the proposed mining, and maps indicating the activities and mining. Mining operators also continuously revise scheduling of pit progression based on several factors including the available coal resources and quality, geotechnical considerations, necessary regulatory approval, operating costs, market factors, engineering and logistical considerations. Plans are therefore dynamic and often subject to ongoing changes.

Scheduling of mine progression, excavation depths, backfilling and the final void form a critical set of information for the purpose of assessing groundwater impacts, affecting not only the extent of impacts but also the timing of those impacts. In the context of the Surat Cumulative Management Area (CMA),

the timing of where and when the excavation is to occur is the more significant factor in considering potential overlap with CSG development.

For the UWIR 2021, up-to-date information was sought directly by OGIA from coal mining tenure holders. This was then compiled and reconciled with IDPs and LDPs and subsequently verified with tenure holders.

Mine schedule plans were provided by tenure holders for certain key timesteps throughout the mine lives, usually corresponding to major changes in mine configuration. Since OGIA requires plans for each year as an input to predicting impacts, these plans were linearly interpolated to provide an annual progression.

3.4 Data provision and data register

The MR Act requires that every coal ML holder has an approved development plan. Under the MR Act, an application for the initial granting of a coal ML must be accompanied by a proposed IDP. An updated LDP is then required to be submitted on a five-yearly basis for the term of the lease. Mining resource authority holders must submit their IDPs and LDPs via the MyMinesOnline platform – the system used to administer resource authorities in Queensland and by resource authority holders to apply for and manage their relevant tenure authorities.

The *Minerals and Coal Reporting* practice direction[1], regulated by *Mineral and Energy Resources (Common Provisions) Act 2014*, prescribes a range of data and interpreted information that mining resource authority holders must include with annual activity reports, providing technical summaries of the authorised activities including maps and any geophysical, geochemical, drilling or remote-sensing data. An activity report must be submitted on a nominated day annually, or within two months of the anniversary day when the lease took effect.

Previous data storage systems (Mineral and Energy Resources Location Information Network (MERLIN)), Queensland Digital Exploration (QDEX) Data and Reports) have recently been replaced by Geological Survey of Queensland's (GSQ) cloud-based Open Data Portal. Tenure holders now submit required reports through this system.

There are also many coal explorations holes in the Surat Basin, to which varied construction and abandonment standards have applied over time. For these holes, there has not been a requirement to submit data to regulators. Therefore, OGIA sought this information from the mining tenure holders in 2020, which suggests that there are at least 18,000 coal exploration holes associated with the 8 mines. These coal holes are typically shallow in depth (less than 200 m).

4 Coal mines within the Surat CMA

Each mining operation is a geographically distinct activity, with some mines in the south of the CMA regionally distant from the remainder of the resource activities occurring further north. Figure 3-1 shows the mine locations within the Surat CMA. For the purposes of reporting, OGIA has grouped the mines into sub-regional areas:

- Northern Coal Area – Wandoan Coal Project, Elimatta and The Range
- Central Coal Area – Cameby Downs, Kogan Creek and Wilkie Creek

[1] https://www.resources.qld.gov.au/__data/assets/pdf_file/0019/1512073/reporting-practice-direction-minerals-coal.pdf

- Eastern Coal Area – New Acland
- Southern Coal Area – Commodore.

4.1 Northern coal area

There are no existing mines in the northern coal area (NCA). Three mines are proposed: the Wandoan Coal Project, Elimatta and The Range. The location of these projects, in relation to the Surat Basin outcrop geology and nearby CSG tenures, is shown in Figure 4-1.

The Surat Basin Rail Project rail infrastructure is proposed to be built by Glencore to service the Wandoan Coal Project. Assessed under an EIS separate from the Wandoan Coal Project, it is envisaged that the Surat Basin Rail Project rail infrastructure will also be utilised by Elimatta and The Range. It will connect to existing rail infrastructure, ultimately delivering coal to the port of Gladstone.

Figure 4-2 provides a snapshot of planned development for the NCA mines at three key time steps – the existing coal production footprint, the planned coal production footprint at 2024 (the end of the current UWIR cycle) and the planned end of life footprint for each mine – as well as the anticipated total disturbance area for each mine.

4.1.1 Wandoan Coal Project

The Wandoan Coal Project (tenure holder: Glencore) was granted MLs (50229, 50230 and 50231) in 2017, covering approximately 30,000 hectares, and an EA in 2019, following an EIS process between 2008 and 2011. Development of the mine is currently on hold subject to market conditions. The proposed mine is located adjacent to the town of Wandoan, with the closest mining lease, ML 50230, less than 1 km to the west. The proposed mining area extends a further 30 km to the west.

The Wandoan Coal Project is a proposed open-cut thermal coal mine targeting the Juandah Coal Measures (Kogan, Macalister Upper, Macalister Lower and Wambo coal seams). The mine development schedule is based upon a construction period of 3 years, followed by 30 years of mining (at a rate of 22 million tonnes per annum (Mtpa)) and a subsequent 2 years of rehabilitation. A total of 15 individual pits are planned in 8 different areas, across project MLs covering approximately 9,200 hectares. Based on the current anticipated start year of 2024, peak development is expected to be around 2056. A map showing the pit footprint for various time steps is shown in Figure 4-2. The landform at the end-of-life footprint does not consider backfilling and stockpiling, as this information is not currently available to OGIA.

Within the EIS, Xstrata Coal (2008) – using an analytical approach – predicted drawdown in aquifers directly intersected by the open pits (i.e. shallow alluvium, weathered zone, and the Walloon Coal Measures). An influence radius of 1 to 2.8 km is predicted from the centre of the open pits. Impacts to the Hutton Sandstone and Precipice Sandstone were not predicted to occur, due to the thick intervening formation of approximately 400 m between those aquifers and the upper Walloon Coal Measures. A decrease in water supply bore yields is predicted to occur at surrounding bores within the directly affected aquifers. The potential for post-closure impacts on local aquifers was assessed as low.

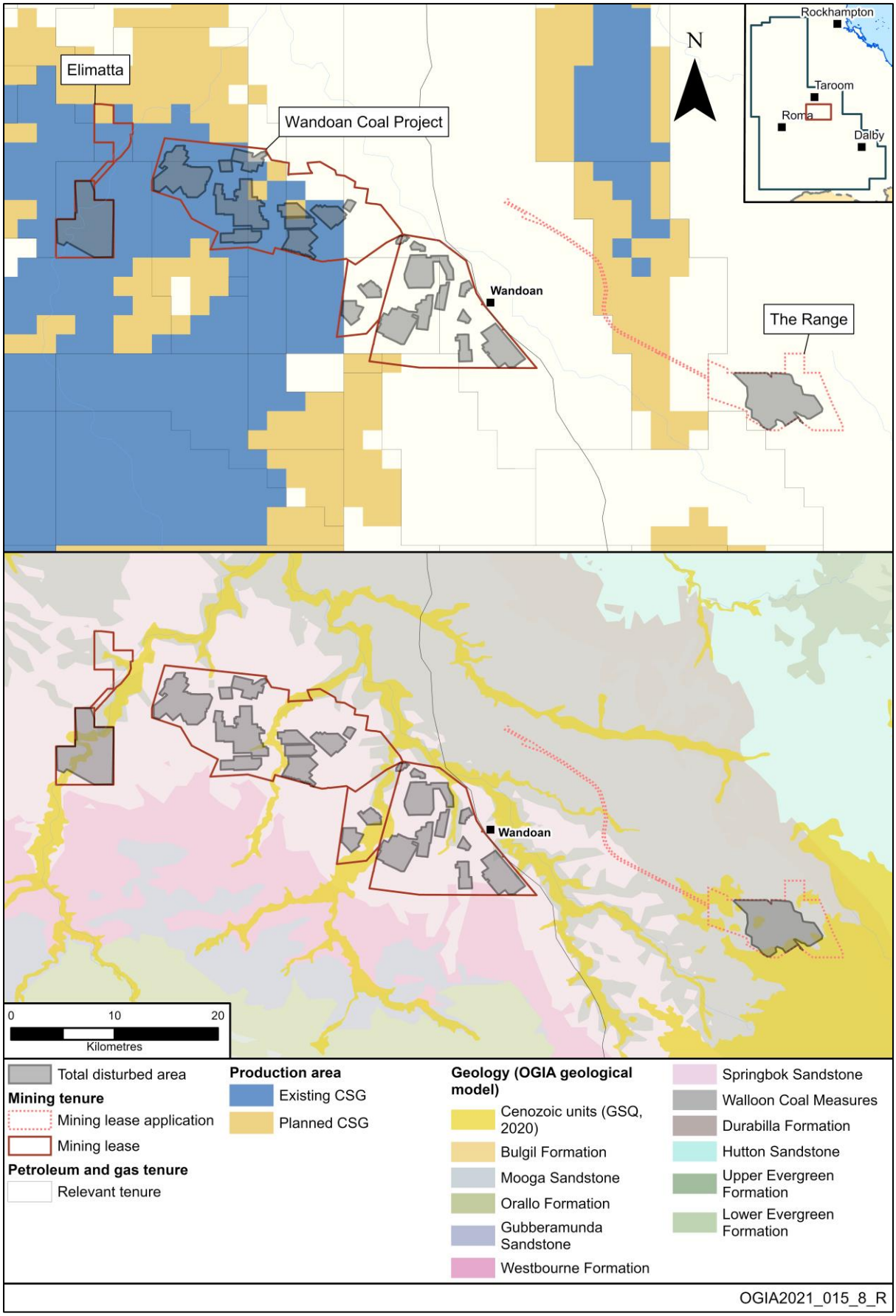

Figure 4-1: Northern Coal Area – Surat Basin

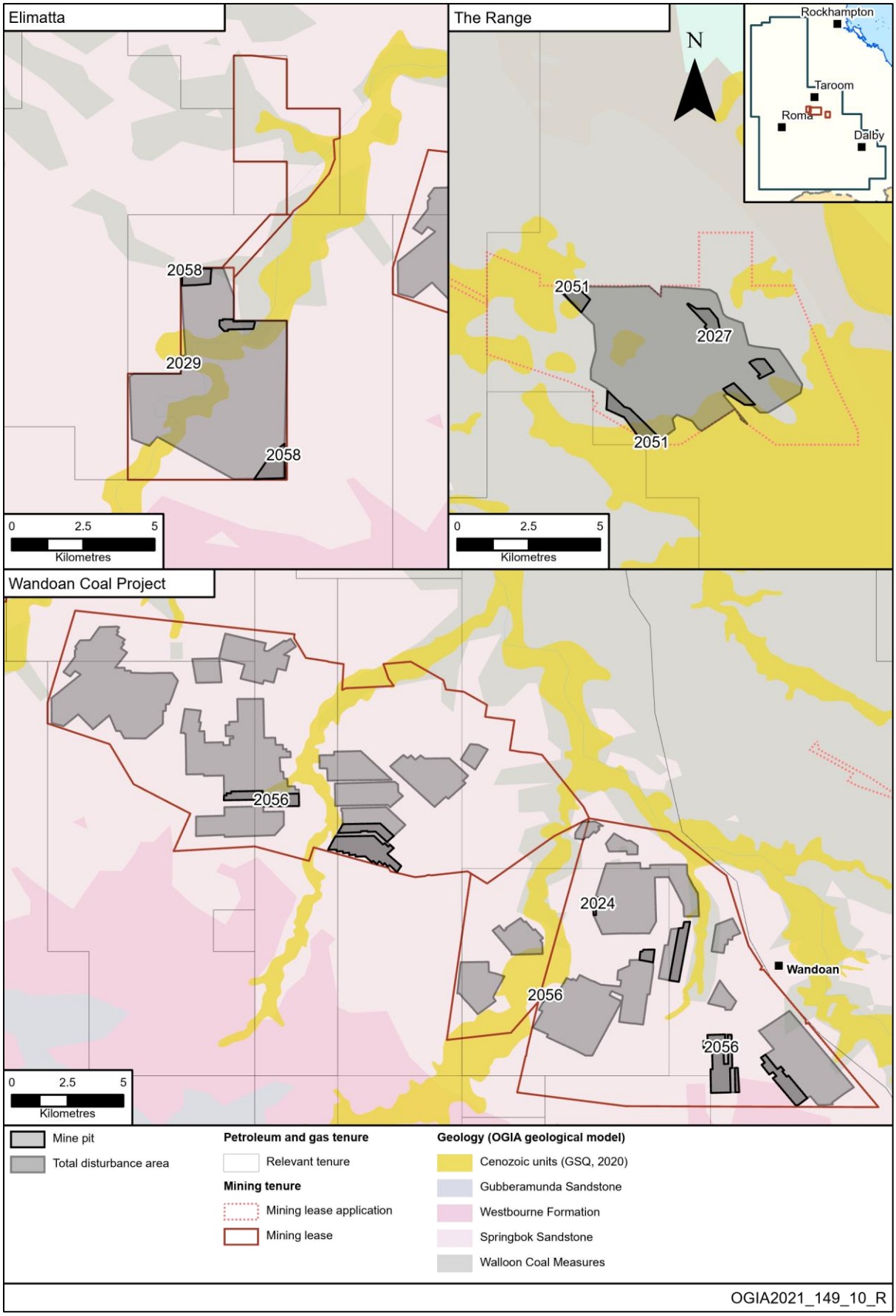

Figure 4-2: Planned coal mining in the Northern Coal Area

4.1.2 Elimatta

Elimatta (tenure holder: New Hope Group) is a proposed open-cut thermal coal mine producing 5 Mtpa from MLs 50254, 50270 and 50271, covering 4,000 hectares. Elimatta is located 35 km west of Wandoan, only a few kilometres from the Wandoan Coal Project mine. In the case of Elimatta, the three ML areas have specific purposes: one is for infrastructure to support mining operations, the second is specifically for transport between the other two leases, and the third is where the actual mine is located. The EIS was submitted in 2012, with an EA granted in 2016. The commencement date for the project is currently expected to be around 2029.

The Elimatta project is intended to mine the Juandah Coal Measures, specifically the Kogan, Macalister Upper, Macalister Lower, Nangram and Wambo/Iona coal seams. The project has a mine development schedule of approximately 30 years, using truck-and-shovel operations at three individual pits covering approximately 2,400 hectares.

As part of the EIS for the Elimatta project, the predicted groundwater impacts were assessed using a numerical groundwater model. The modelling predicts that the zone of depressurisation generally extends less than 1 km from the edge of the open pit in the coal seams. Some exceptions occur along the alignment of Horse Creek, where depressurisation is slightly more extensive. There is no predicted drawdown in the Walloon Coal Measures underlying the pit floor. Predicted groundwater inflows are <1 ML/day for the smaller northern and western pits, and up to 2.5 ML/day for the larger south-eastern open pit.

There is approximately 2.8 km between the closest Elimatta and Wandoan Coal Project tenures, and about 3.6 km between the respective disturbance areas at the closest points. Cumulative impact modelling carried out as part of the EIS indicates that there is no predicted cumulative impact during the simultaneous mining of the two projects. However, post-mining, the zones of depressurisation generated by both projects are predicted to join and create a zone of cumulative impact.

4.1.3 The Range

The EIS for The Range (tenure holder: Stanmore) was submitted in 2012, with an EA applied for in 2019. The Range is a proposed open-cut thermal coal mine producing 5 Mtpa from ML (application) 55001, covering 5,200 hectares. The Range ML is situated 20 km to the east of Wandoan and extends a further 10 km to the east. To date, no construction or mining activities have been carried out at The Range. The commencement date for the project is currently expected to be around.

The Range project is intended to mine the Taroom Coal Measures, specifically the Auburn, Bulwer and Condamine coal seams. The project has a mine development schedule of approximately 24 years, using truck-and-shovel operations at three individual pits spanning 2,600 hectares.

The potential groundwater impacts from the mine development were assessed in the EIS using an analytical model. The maximum drawdown from the mine was predicted to be 60 m, with the radius of influence extending between 660 and 1,150 m from the open pit. Impacts to the underlying Hutton Sandstone were assessed as limited, due to the presence of the 50-to-200-m-thick Eurombah Formation (equivalent of the Durabilla Formation). An upward leakage of 27 m^3/day over 1,100 hectares was predicted from the Hutton Sandstone during the later stages of mining.

4.2 Central coal area

There are three existing mines in the central coal area (CCA): Wilkie Creek, Kogan Creek and Cameby Downs. The location of these projects is shown in Figure 4-3 with respect to the Surat Basin outcrop geology and nearby CSG tenures.

Figure 4-4 provides a snapshot of planned development for the CCA mines at three key time steps – the existing coal production footprint, the planned coal production footprint at 2024 (the end of the current UWIR cycle) and the planned end of life footprint for each mine – as well as the anticipated total disturbance area for each mine.

4.2.1 Cameby Downs mine

The Cameby Downs mine (tenure holder: Yancoal) was granted ML 50233 in 2006, with operations commencing in 2009. An expansion was applied for in 2017 to increase coal production from 2.8 to 3.5 Mtpa. The expansion was approved in 2019 and included the addition of MLs 50258, 50259, 50260 and 50269, providing a total mining lease area of 6,800 hectares. The mine itself is currently progressing through ML 50233, 18 km northeast of Miles and 28 km northwest of Chinchilla.

The Cameby Downs mine is an open-cut thermal coal mine targeting the Upper Juandah Coal Measures (Kogan, Macalister and Nangram coal seams). The mine development is based upon the cessation of mining in 2092 (an approximate 75-year mine life). The total disturbance area is approximately 5,700 hectares.

Within the expansion impact assessment, impacts from the approved Cameby Downs mine and the proposed expansion were predicted by AGE (2018) using a 3D numerical groundwater flow model. The modelling predicted that groundwater inflows to the open pits throughout the mine development would be between 76 and 355 ML/year (0.2–0.97 ML/day).

The maximum modelled drawdown is predicted to extend approximately 2.5 km from the mining lease boundary and a maximum of 5 km from the open pits. A maximum drawdown magnitude greater than 50 m was predicted near the open pits. Cumulative (with CSG) impacts were assessed as part of the EIS. Using general head boundary conditions to simulate CSG drawdown, the cumulative impact assessment predicted up to 10–20 m drawdown at the mining lease boundary as a result of CSG development. Cumulative impacts were therefore considered likely.

Mining at Cameby Downs will result in the development of two final voids, termed the western void and the eastern void. Groundwater levels in the final voids are predicted to reach equilibrated lake levels of approximately 280 metres Australian Height Datum (mAHD) in the eastern void and 285 mAHD in the western void. These pit lake groundwater levels are predicted to be between 20 m (western void) and 25 m (eastern void) below the pre-mining groundwater levels.

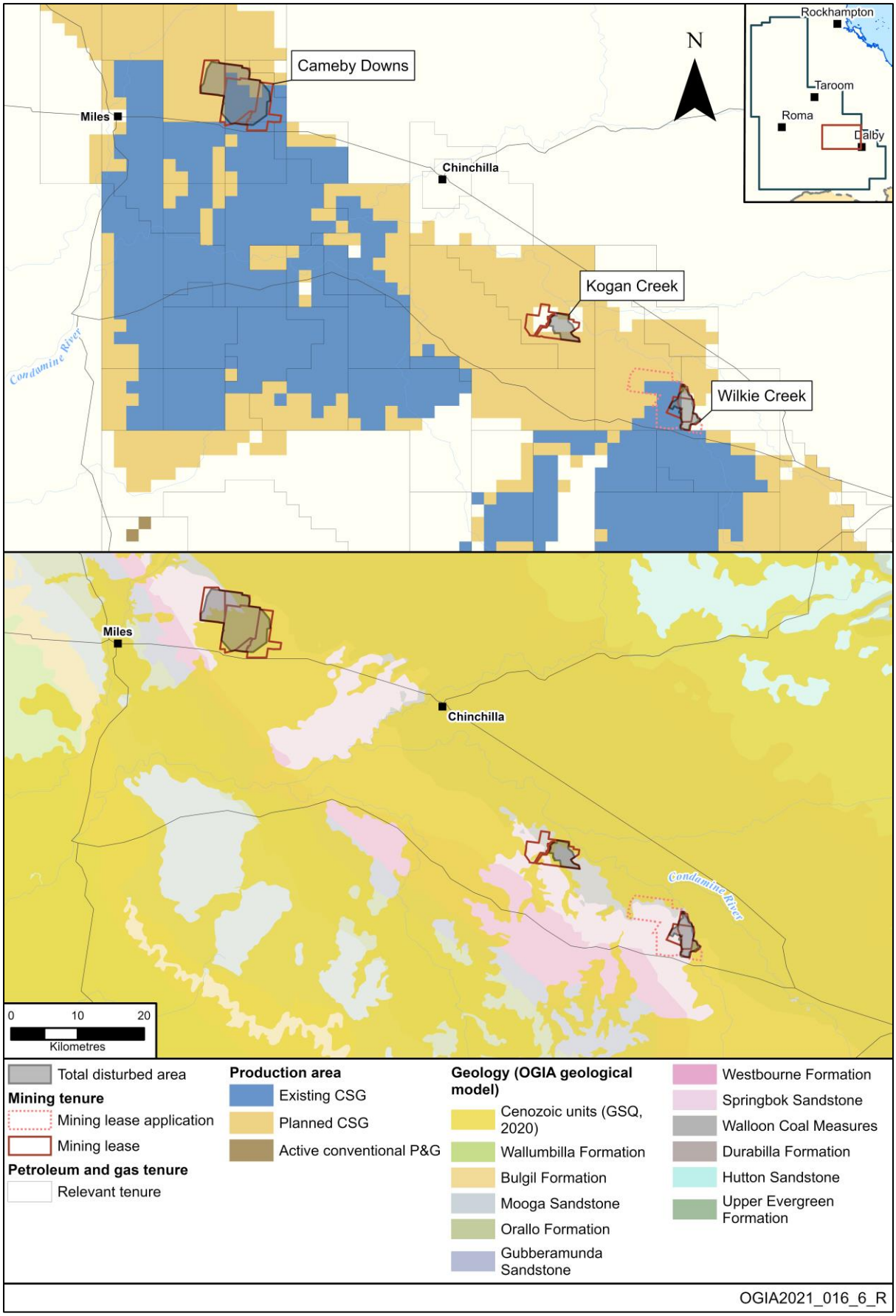

Figure 4-3: Central Coal Area – Surat Basin

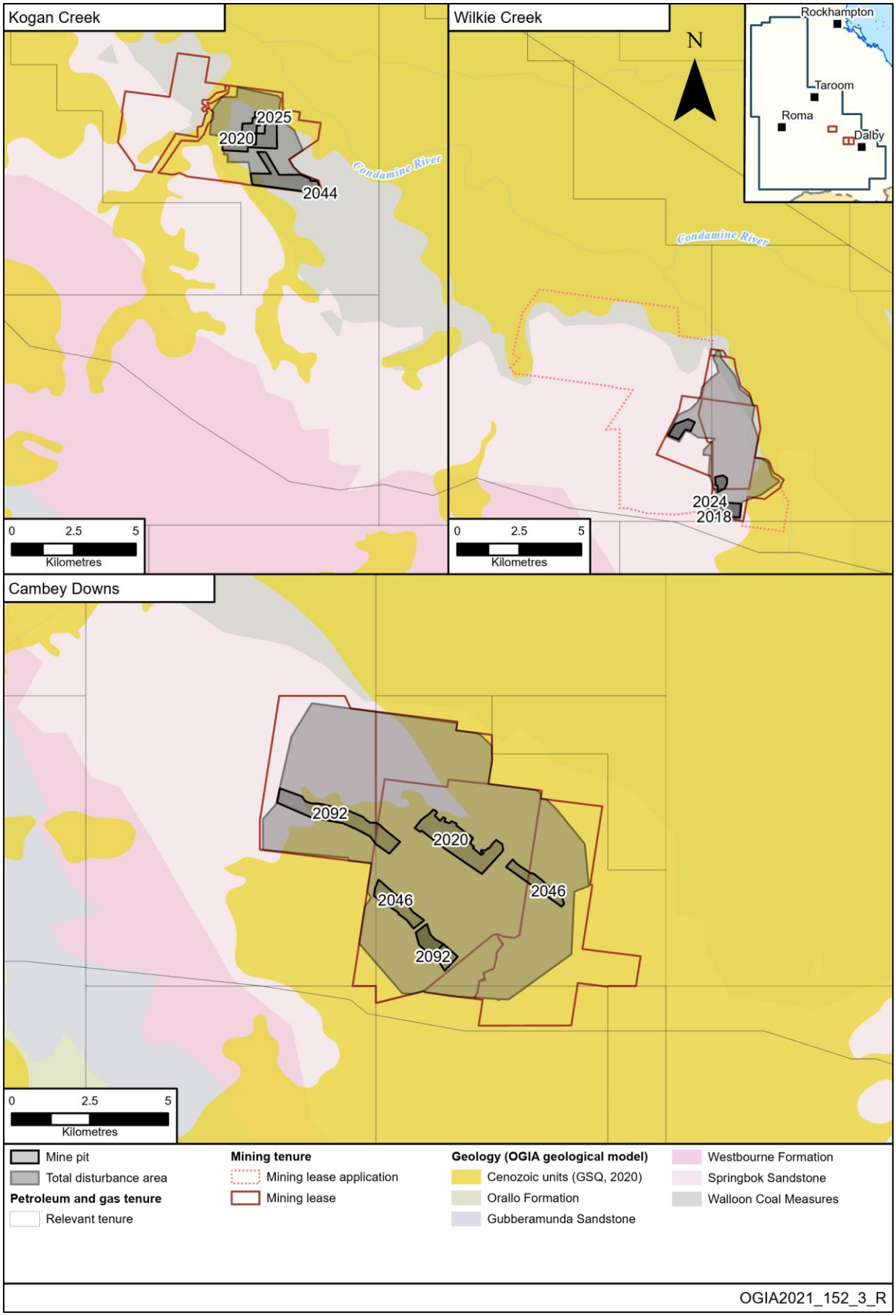

Figure 4-4: Planned coal mining in the Central Coal Area

4.2.2 Kogan Creek mine

The Kogan Creek mine (tenure holder: CS Energy) commenced operations in 2000. Located on ML 50074, which covers approximately 2,400 hectares, the mine is expected to continue production until 2040. Operated by Golding Contractors, the mine is located 10 km north of the Kogan township and 25 km southeast of Chinchilla. The mine delivers approximately 2.8Mt of coal each year to the adjacent power station via 4 km of overland conveyer.

Kogan Creek mine has a production capacity of 2.8 Mtpa. CS Energy describes three main coal seams ('M', 'N' and 'O') with a total thickness of 12 m. The total disturbance area is anticipated to be 900 hectares.

While there is little information available on the predicted, potential or actual impacts of the Kogan Creek mine on the groundwater environment, Evans and Arunakumarun (2003) predicted groundwater inflows between 0.38 and 0.42 ML/day.

4.2.3 Wilkie Creek mine

The Wilkie Creek mine (tenure holder: Peabody[2]) commenced operations in 1994 with a production rate of 1.2 Mtpa. A cessation of coal mining operations was announced at the end of 2013. The Wilkie Creek mine is currently under closure and rehabilitation and no future mining or mine development is proposed. The mine includes MLs 5908, 5501350208, 50214, 50215, 50276 and 55004, which cover 1,100 hectares.

There is little information available on the predicted, potential or actual impacts of the mine on the groundwater environment. There are currently two final voids remaining at the Wilkie Creek mine: 'B pit' and 'E pit', described by Cowie Environmental Services (2018) as follows:

- B pit is in the central and southern side of the mine. The southern end of B pit (within ML 50215) consists of two voids, being Pit #3 void and B Pit South void. Both have been partially backfilled with coarse rejects material and remain as voids. The nominal base of B Pit South (East) is 259 mAHD.
- E pit is located on the western side of the mine. It is within ML 50276 and was the last area in which mining operations occurred prior to the mining cessation. The nominal base of the E pit is 255 mAHD.

4.3 Eastern coal area

There is one existing mine in the eastern coal area (ECA) – the New Acland mine, Stages 1 and 2. There is an advanced proposal (subject to regulatory approval) for the expansion of the mine, known as Stage 3. Figure 4-5 provides a snapshot of the planned development for the New Acland mine at three key time steps – the existing coal production footprint, the planned coal production footprint at 2024 (the end of the current UWIR cycle) and the planned end of life footprint – as well as the anticipated total disturbance area.

[2] Tenure in transaction to New Wilkie Energy Pty Limited

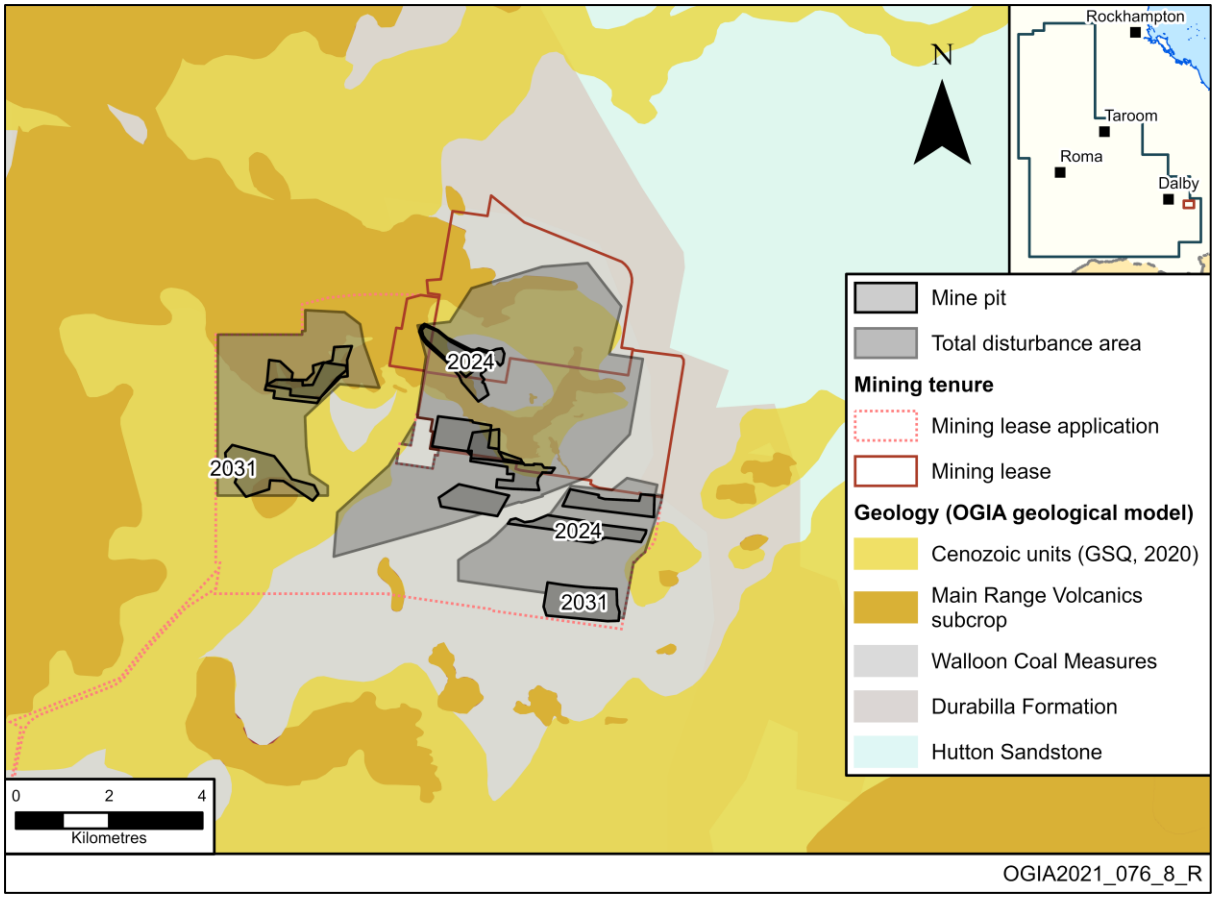

Figure 4-5: Planned coal mining in the Eastern Coal Area

4.3.1 New Acland

New Acland (tenure holder: New Hope Group) is an existing open-cut coal mine with an approval to produce 5.2 Mtpa of thermal coal from MLs 50170 and 50216 (Stages 1 and 2) covering 2,200 hectares. Operating since 2002, the New Acland mine open pits intersect the Main Range Volcanics to access the Acland coal seams, equivalent to the Taroom Coal Measures. The upper part of the Walloon Coal Measures (i.e. Juandah Coal Measures) is not present at the location of mine.

There have been historical mining activities in the New Acland region since 1913. There was a steady increase in mining activity that peaked in the 1950s, with the last of the historical mines closing in 1984 (New Hope Group 2014). All the historical mines were small-scale, pick-and-shovel, single seam operations, targeting the shallowest coal seam at each location.

There are three existing open pits at New Acland: North Pit, South Pit and Centre Pit. Since the commencement of the mine in 2002, the open pits have progressed in a south–south-westerly direction (down dip) with pit voids partially backfilled with overburden. These open pits have a combined footprint of approximately 240 hectares and a maximum depth of approximately 60 m. The final void for New Acland Stages 1 and 2 will be located within MLs 50170 and 50216 with a footprint of 160 hectares.

The proposed Stage 3 expansion involves an increase in production (up to 7.5 Mtpa) to the immediate south and west of the existing operations and is the subject of ML application 50232, covering an area of almost 3,700 hectares. There are three proposed pits, named Manning Vale East, Manning Vale West and Willeroo, with a total footprint of 457 hectares before rehabilitation. Since commencement of the EIS process for the Stage 3 expansion in 2009, the project approval has been subject to legal

challenges. In January 2017, the New Acland Stage 3 expansion received approval under the Australian Government's *Environment Protection Biodiversity Conservation Act 1999*. An application for an associated water licence for the Stage 3 expansion is currently under consideration by Queensland's Department of Regional Development, Manufacturing and Water.

Over its proposed 11-year mine life period, the New Acland Stage 3 expansion would follow a pattern and method of mining similar to those of Stages 1 and 2. The existing and proposed open pits for four time periods (current pits, 2024, 2033 (end of life) and total disturbance) are shown in Figure 4-5. The final landform for the Stage 3 expansion will comprise three final voids approximately 60 to 80 metres below the existing ground level. The total depressed landform area below the pre-mining water table, for the New Acland Stage 3 expansion, is 160 hectares.

4.4 Southern coal area

There is one existing mine in the southern coal area (SCA): the Commodore mine. Although an expansion of the Commodore mine is under consideration by the tenure holder, there has been no formal approval submission.

4.4.1 Commodore mine

Figure 4-6 provides a snapshot of the planned development for the Commodore mine at three key time steps – the existing coal production footprint, the planned coal production footprint at 2024 (the end of the current UWIR cycle) and the planned end of life footprint – as well as the anticipated total disturbance area.

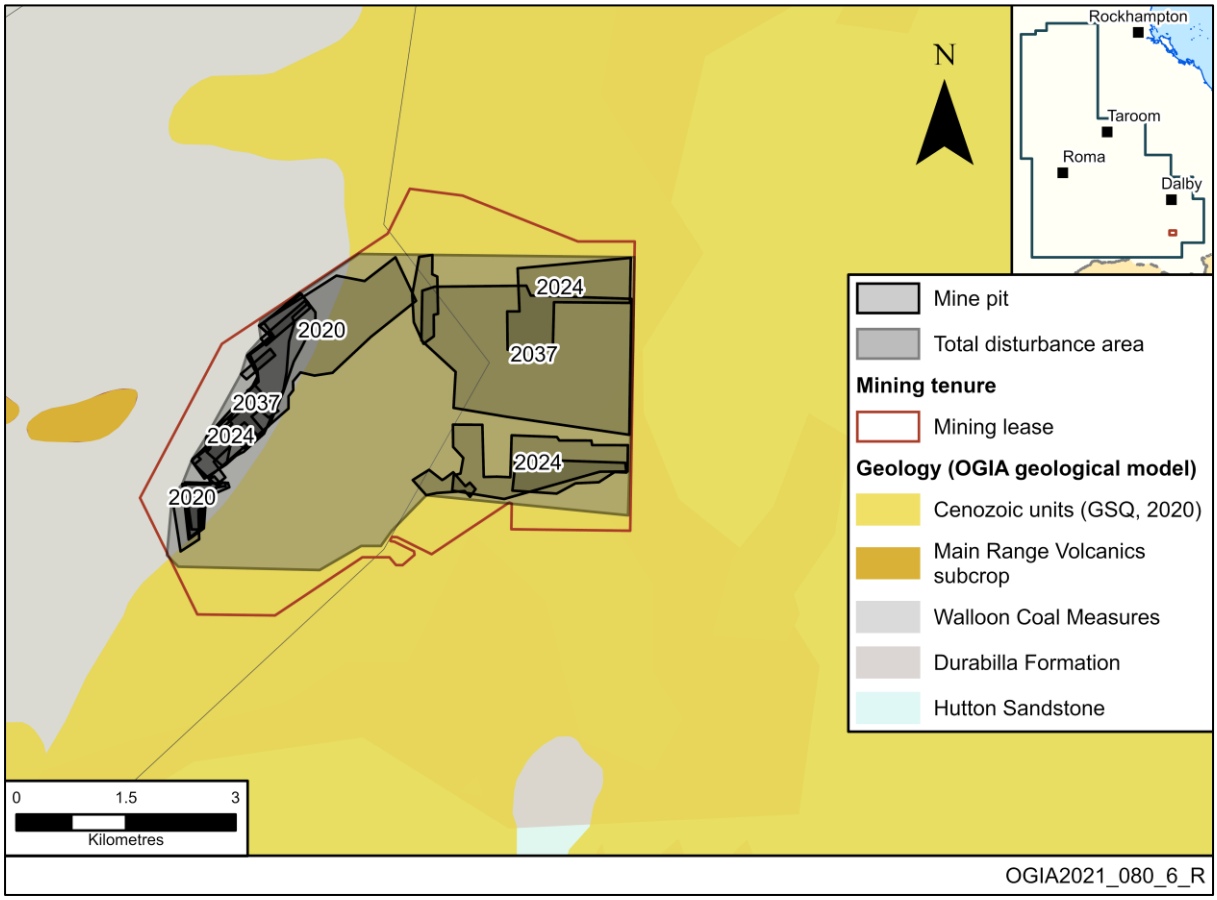

Figure 4-6: Southern Coal Area – Surat Basin

In 1999, the Commodore mine (tenure holder: Queensland Power Company (Intergen)) was granted ML 50151, which spans 2,300 hectares, following an EIS process for the Millmerran Power Project between 1997 and 1999.

The Commodore mine is an open-cut thermal coal mine targeting the Taroom Coal Measures (Commodore coal seam). The mine development schedule was based upon 30 years of mining at a rate of 3.4 Mtpa. Coal produced from the mine is transported by conveyor direct to the Millmerran Power Station. The Commodore mine also involves the removal of Back Creek alluvium and diversion of Back Creek within the mining lease. The total disturbance area of the mine is anticipated to be approximately 1,800 hectares.

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Appendix 1

Table A1-1: Status and key attributes of coal mines in the Surat Basin

Region	Mine	Tenure holder[1]	Mining lease numbers	Status	Start	End of mine production (final void)	Target seam	Excavated overburden	Pit depth (m)	Maximum disturbance footprint (ha)
Northern Coal Area	Wandoan	Glencore (ICRA Wandoan Pty Ltd, Wandoan Holdings Pty Ltd, SCAP Wandoan Pty Ltd)	50229, 50231, 50230	proposed	2024	2056	JCM (Kogan to Wambo)	Quaternary alluvium, Springbok Sandstone, JCM	24–60	9,200
	Elimatta	New Hope (Taroom Coal Pty Ltd)	50254, 50271, 50270	proposed	2029	2058	JCM (Kogan to Wambo)	Quaternary alluvium, Springbok Sandstone, JCM	50–150	2,400
	The Range	Stanmore Coal	55001, 55009, 55010[2]	proposed	2027	2051	TCM	Tangalooma Sandstone, TCM	20–120	2,600
Central Coal Area	Cameby Downs	Yancoal (Syntech Resources Pty Ltd)	50258, 50259, 50233, 50269, 50260	operational	2009	2092	Upper JCM (Kogan, Macalister and Nangram)	Springbok Sandstone, JCM	40–110	5,700
	Kogan Creek	CS Energy (Aberdare Collieries Pty)	50074	operational	2000	2040	Upper JCM (Macalister and Nangram)	JCM	40–60	900

Region	Mine	Tenure holder[1]	Mining lease numbers	Status	Start	End of mine production (final void)	Target seam	Excavated overburden	Pit depth (m)	Maximum disturbance footprint (ha)
	Wilkie Creek	Peabody (Peabody (Wilkie Creek) Pty Ltd)	55013, 50208, 50214, 5908, 50276, 55004, 50215	suspended	1995	2015	Upper JCM (Macalister)	JCM	30–60	1,100
Eastern Coal Area	New Acland (Stages 1 and 2)	New Hope (New Acland Coal Pty Ltd)	50170, 50216	operational	2001	2022	TCM (Acland-Sabine, Waipanna and Balgowan)	Main Range Volcanics, TCM	30–60	1,400
	New Acland (Stage 3)	New Hope (New Acland Coal Pty Ltd)	50232	proposed	2022	2033	TCM (Acland-Sabine)	Main Range Volcanics, TCM	35–55	2,000
Southern Coal Area	Commodore	Queensland Power Company Pty Ltd	50151	operational	2001	2037	TCM (Commodore)	Back Creek alluvium, TCM	15–50	1,800

Notes:

1. Tenure holder names in brackets are the authorised holders.
2. Mining leases for The Range Project are still under application.

- Ha = hectares, JCM = Juandah Coal Measures, TCM = Taroom Coal Measures.


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