

# Cadia Continued Operations Project

## PROJECT INFORMATION SHEET ISSUE #4 - TSF SITE SELECTION

As introduced in Project Information Sheet #1, Newcrest has commenced planning for a long-term continuation to mining operations known as the Cadia Continued Operations Project (CCOP).

May 2022

## Introduction

Between October and December 2021, Cadia Valley Operations (Cadia) sought initial feedback on our proposed Cadia Continued Operations Project (CCOP) concepts from key stakeholders in our community. Discussions sought to particularly identify views and concerns relating to three key CCOP components:

- the proposed construction of a new Tailings Storage Facility (TSF4)
- an additional off-site water storage (South Water Storage Facility), and
- potential realignment of local roads - Cadia and Panuara Roads.

Approximately 43 meetings have been conducted to date with interested stakeholders, including local landholders, State Government agencies and local councils with valuable feedback assisting Cadia to further refine the proposed CCOP concepts and scope.

As a result of consultation with our local stakeholders, we have been asked to provide more information on the choice of the preferred location for TSF4 study area, to the immediate south and east of the existing South TSF.

This information sheet provides an overview of the process followed to identify the preferred location based on several key assessment criteria.

## Regional location assessment

### Overview

A review of the region was completed investigating a 40km radius around Cadia to determine possible study areas for a proposed TSF4. This area is represented in Figure 1 below.

### Key selection criteria

- Topography which favours suitable tailings deposition methods
- Environmental and Community potential impacts based on feedback from Cadia East Environmental Assessment
- Technical/Operability and capacity ~1,084M tonnes

### Key assessment outcomes

- Valley fill options all lie within major river systems which have larger biodiversity impacts
- No areas warranted pumping of tailings outside the immediate vicinity of Cadia

### Initial Decision

Further assessments will focus on options for tailings storage within close proximity to existing operations.

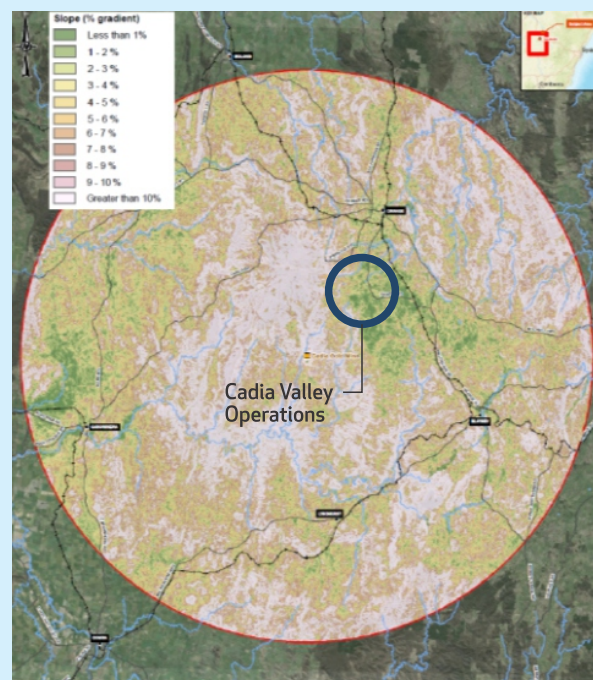
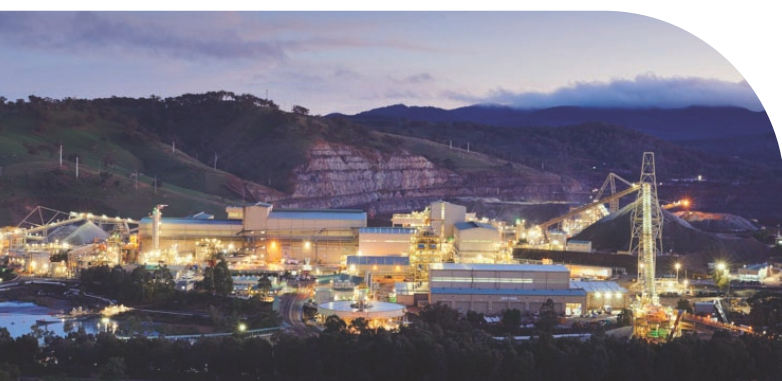


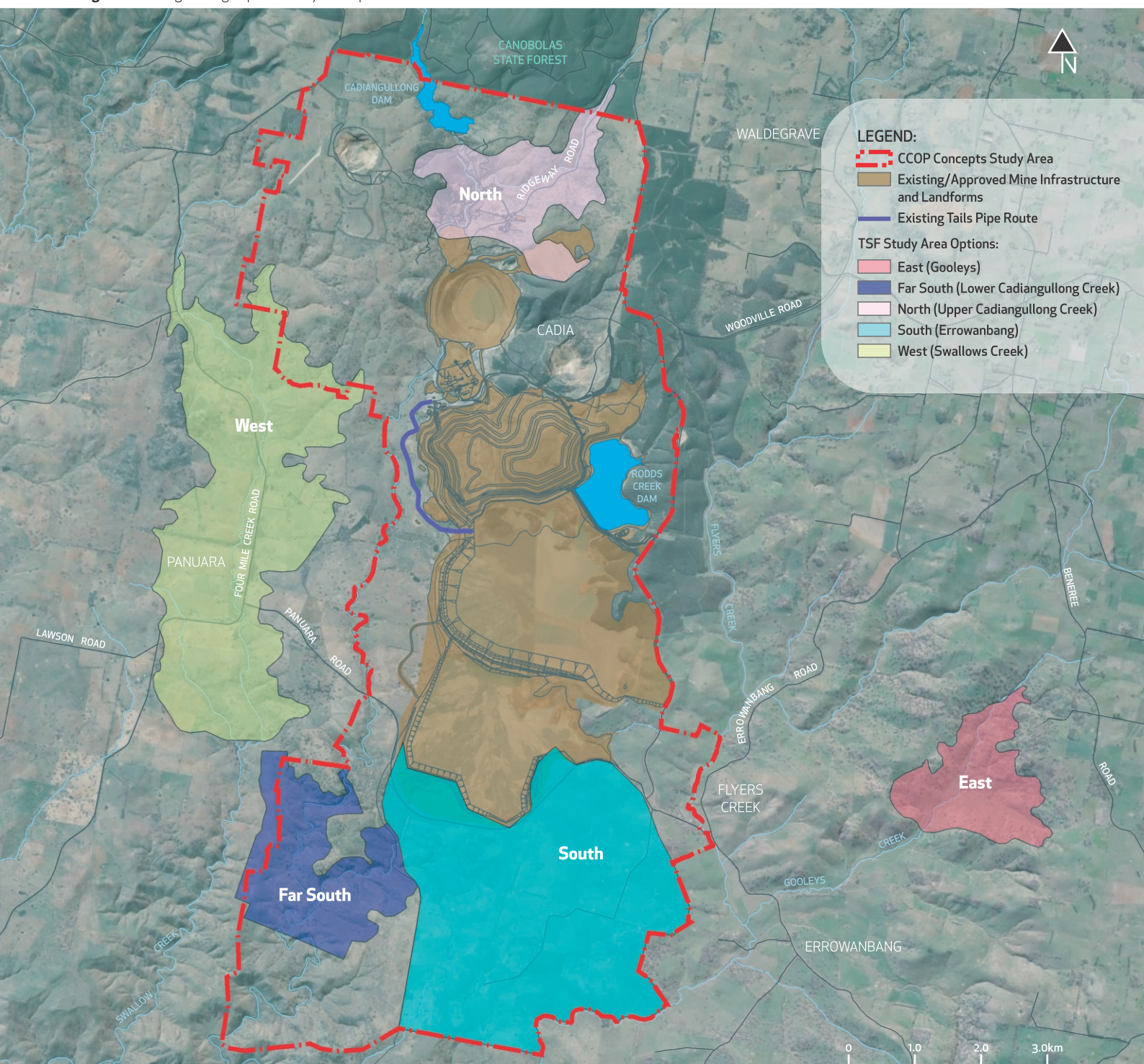
Figure 1 Regional Analysis for Tailings Storage Options



# Process for reviewing tailings storage Study Areas close to the existing operations

| Selection Criteria            | Objective                                                                                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biodiversity Impacts          | Avoid or minimise disturbance to native vegetation, fauna habitat and wildlife corridors                                                                                                                                                                    |
| Community Feedback            | Account for preferences and concerns of local stakeholders considering feedback from: <ul style="list-style-type: none"> <li>• Cadia East Environmental Assessment (2008 – 2012)</li> <li>• Recent consultation on Life of Mine Tailings options</li> </ul> |
| Water Management              | Avoid impacts on hydrology (creek alignments / flow rates)                                                                                                                                                                                                  |
| Tailings Storage Capacity     | 1,084 million tonne storage capacity                                                                                                                                                                                                                        |
| Capital Costs and Operability | Minimized capital cost<br>No disruption to current operations                                                                                                                                                                                               |

**Figure 2** Tailings Storage Options Study Area Options



## North (Upper Cadiangullong Creek)

### DESCRIPTION

Embankment constructed across the Cadiangullong valley, just upstream of the Cadia Hill pit and located partly over a backfilled pit (Cadia Extended). **Capacity ~ 690 - 900Mt.**

### ASSESSMENT OUTCOMES

- TSF capacity very favourable for a life of mine solution with favourable embankment volumes
- Not directly visible to surrounding community
- Location would sterilise the resource at Cadia Extended (Big Cadia)
- Dam safety risk to manage flood events
- Significant water diversions required for Cadiangullong Creek
- Relocation of Upper Cadiangullong Creek Dam required
- Consequence of a dam failure would be significant due to downstream impacts

## West (Swallow Creek)

### DESCRIPTION

Three sub tailings dams established across Swallow Creek Valley to the west of Cadia. **Capacity ~ 300 - 420Mt.** Swallow Creek has the lowest capacity of all options.

### ASSESSMENT OUTCOMES

- TSF tonnage capacity is not sufficient and requires additional TSF in other locations.
- Extensive land disturbance and footprint required to store tailings
- Environmental offset from Cadia East which has been formalised in the Blayney Shire Council Local Environment Plan (BSC LEP)
- Distance from Concentrators reasonable in comparison to other options
- Large area of Swallow Creek removed from the catchment

## Far South (Lower Cadiangullong Creek)

### DESCRIPTION

The Far South option covers lower sections of Cadiangullong Creek and Rodd's Creek. **Capacity ~ 210 - 240Mt.**

### ASSESSMENT OUTCOMES

- TSF storage capacity only provides a small fraction of the life of mine requirements
- Relatively small disturbance area
- Significant water diversions required (conduits, channels, tunnel) for Cadiangullong Creek
- Minimal impacts to maintaining existing Panuara Road alignment

## East (Gooleys)

### DESCRIPTION

The East option covers an area over Gooley's Creek approximately 12km east of the Cadia Valley Operations processing facilities. **Capacity ~ 380 - 420Mt.**

### ASSESSMENT OUTCOMES

- Impacts on a new catchment not exposed to mining related activities
- Would require a creek diversion
- TSF tonnage capacity is not sufficient and requires additional TSF
- Pumping and transport of tailings to the TSF is long and may create operational issues

## South (Errowanbang)

### DESCRIPTION

The South option is located across the Errowanbang site south east of the existing Southern Tailings Storage Facility. **Capacity ~ 1,100Mt.**

### ASSESSMENT OUTCOMES

- Relocation of Panuara Road required
- TSF storage capacity very favourable for a life of mine solution
- Impacts on Flyers Creek and Errowanbang Woolshed can be avoided (subject to targeted design of TSF alignment)
- Opportunity to integrate with the STSF to minimise land disturbance



# Summary of Assessment

## KEY OUTCOMES:

- Only the North and South options provide a life of mine tailing storage solution
- Options to the East and West do not provide a life of mine solution and would require additional TSFs resulting in an increase in land disturbance and overall environmental impacts
- The North option has dam safety and consequence impacts

## SITE SELECTION:

The **South Option** is identified as the preferred solution for the following reason:

- Provides a life of mine solution for tailings storage
- Minimises the overall land disturbance impacts for a new TSF
- Able to be integrated with the STSF which reduces the overall impact footprint and allows for progressive rehabilitation
- Avoids locating the dam on additional water streams (Cadiangullong Creek and Belubula River)

# How can I be involved?

Both Cadia and Umwelt would like to continue to engage with you to understand your views regarding the proposed tailings storage options. Your input will continue to inform the project design and contribute to the preparation of the Social Impact Assessment (SIA) for the project.

If you would like to provide any input in relation to tailings storage options, or the CCOP more generally, please:

- contact us directly (as per the contact details below) or to arrange a meeting time
- scan the QR code below (which provides a link to a feedback form), or
- contact the Umwelt team at: [social-team@umwelt.com.au](mailto:social-team@umwelt.com.au)



<https://ccopsia.questionpro.com>

## Contact the Newcrest team

General feedback or questions are encouraged through emailing: [c.copeis@newcrest.com.au](mailto:c.copeis@newcrest.com.au)

**Jane Yelland**  
Approvals Superintendent  
Cadia Valley Operations  
Phone: 0434 077 267

Website and Interactive Map of CCOP:



<https://caportal.com.au/umwelt/cadia>

