

A faint, stylized topographic map of a mountain range is visible in the background at the top of the slide. The map features several peaks and valleys, with the highest peaks shaded in a light gray color.

BOWDENS **SILVER**

Community Consultative Committee

12 December 2017



CONTENTS

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- **Community**

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BOWDENS **SILVER**

Welcome and Overview



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WELCOME

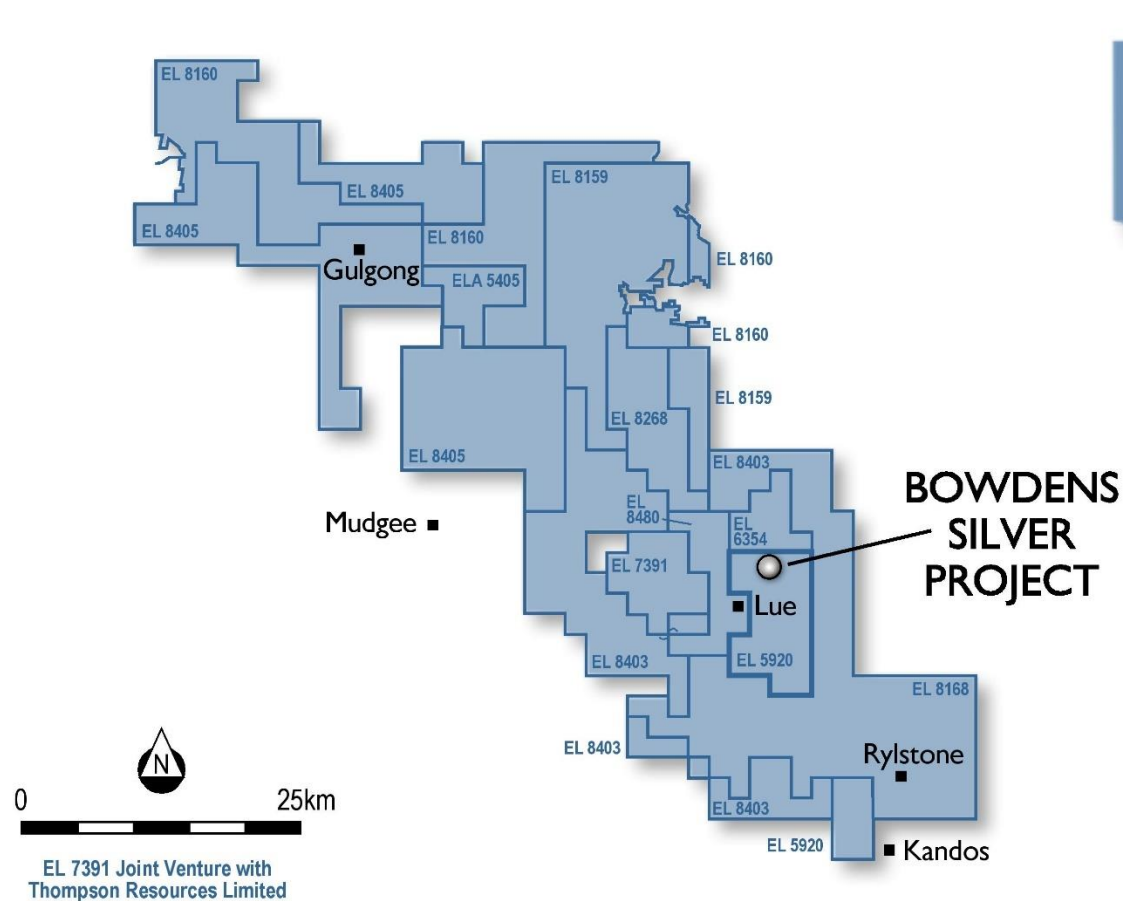
- **Inaugural Bowdens Silver Community Consultative Committee Meeting (CCC) under Department of Planning and Environment (DPE) guidelines.**
- **Bowdens Silver “Exploration” stage voluntary CCC under Division of Resources and Geoscience (formerly DRE) has now been completed.**
- **Welcome of Independent Chair, MWRC representative and community members.**
- **Introduction of Bowdens Silver representatives.**

PROJECT INTRODUCTION

- The largest undeveloped silver deposit in Australia and one of the largest globally.
- Resource of 163 million ounces of silver (275 million ounces of silver equivalent when zinc and lead included).
- Classified as “State Significant Development” in New South Wales.
- Definitive Feasibility Study and Environmental Impact Statement targeted completion early 2018.

“Our proposal will be for the development of a long term open cut mining operation. The development will be a more condensed, enhanced and environmentally responsible enterprise. Together, these integrated activities will bring many benefits to the district by way of direct employment, the supply of support industries, economic investment into the local communities and support for local development, educational and sponsorship initiatives.” Anthony McClure, Managing Director

LOCATION



1,764 km² (435,905 acres)
in exploration tenements
stretching from north of
Gulgong to Kandos.

BOWDENS
SILVER



OVERVIEW

- Development of a long term sustainable mining operation.
- Open cut mine development in north-east sector of deposit.
- Lower impact development circa 2.0 million tonnes per annum of ore.
- Production of approximately 5 million ounces of silver per annum with zinc and lead as by-products.
- Metal is concentrated by conventional processing methods.
- Concentrates for sale in Australia or abroad for smelting and refining.
- Capital investment circa A\$200 million.

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HISTORY

- Early work by CRA (now Rio Tinto) and others.
- Kingsgate Consolidated purchased from Silver Standard.
- Approximately A\$60 million spent on the project to date prior to our ownership.
- Work halted in mid 2013 with silver price downturn.
- Previous development concept was a larger 4.0-4.5 million tonnes per annum development.
- Silver Mines Limited purchased 85% in June 2016 and completed 100% acquisition in December 2016.

BOWDENS **SILVER**

Our Team



WHO ARE WE?

- The Bowdens Silver Project is 100% owned by Bowdens Silver Pty Ltd.
- Bowdens Silver Pty Ltd is a 100% subsidiary of Australian public company:



- Silver Mines Limited is listed on the Australian Securities Exchange and has 2,800 shareholders.
- Silver Mines Limited purchased the project in mid 2016.

THE LOCAL TEAM

- Bowdens Silver has 25 employees.
- Full-time and part-time.

Team	
Geological	7
Field Services	8
Environmental and Compliance	3
Community Liaison	2
Administration	3
Farm and Maintenance	2
Total	25

- All but one employee living locally within the MWRC local government area.



FARMING

- Current footprint of 4,102 acres with full-time farm manager.
- Merino sheep flock of ~1,450.
- 85 Black Angus and Black Angus cross cattle.
- Pest eradication and weed control activities continuing year round.



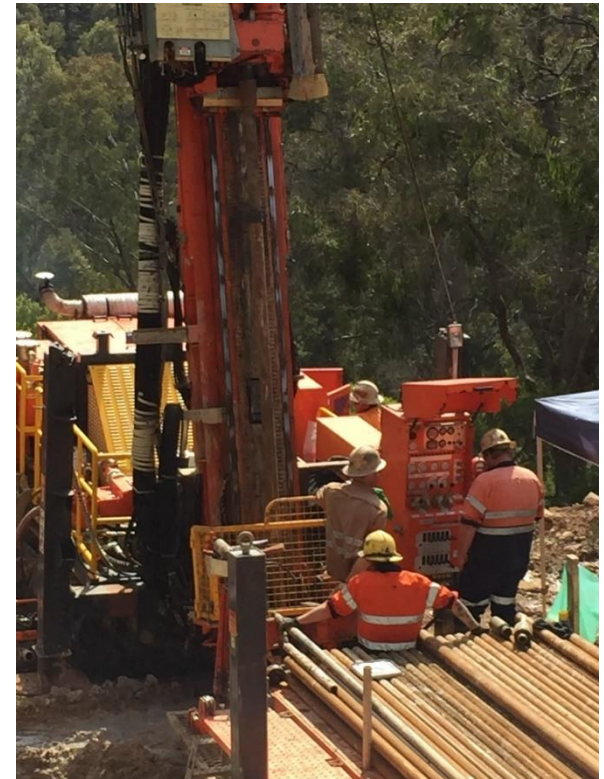


BOWDENS **SILVER**

*Development,
Feasibility Study and
Environmental Impact Statement*

TECHNICAL WORKS ON SITE

- 158 drill holes by Bowdens Silver completed for over 28,000 metres.
- 68,000 metres completed prior to Bowdens Silver.
- Recent drilling completed for;
 - Defining and increasing confidence of Mineral Resources.
 - Sterilisation drilling in areas of future infrastructure.
 - Mineral exploration.
- Drilling undertaken with sound suppression and continuous monitoring.



BOWDENS SILVER RESOURCE (as at September 2017)

30 g/t Ag Eq Cut	Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Zinc (%)	Lead (%)	Million Ounces Silver	Million Ounces Silver Eq.
Measured	76	72	45	0.37	0.25	111	175
Indicated	29	59	31	0.38	0.25	29	55
Measured & Indicated	105	68	41	0.37	0.25	140	230
Inferred	23	60	31	0.40	0.28	23	45
Total	128	67	40	0.38	0.26	163	275

Compared to the previous owners' 2012 Mineral Resource Estimate this resource represents a:

- 51% increase in total silver equivalent ounces
- 22% increase in silver ounces
- 45% increase in total tonnes
- Measured and Indicated Resources increased from 59% to 82% of the total resource.



FEASIBILITY STUDY

- Feasibility Study commenced mid 2016 and nearing completion.
- Items either completed or advanced include;
 - Drilling
 - Mineral Resource and Ore Reserve estimation
 - Mine design and scheduling
 - Metallurgy and process design
 - Infrastructure planning and design
 - Tailings design
 - Water assessments
 - Optimisation and economic assessment.

FEASIBILITY STUDY

- Feasibility Study works by GR Engineering, AMC, ATC Williams and others.
- Optimisation work is currently being undertaken to determine project parameters.
- Latest iteration considers...
 - Several different mine designs are being considered.
 - Smaller, more robust lower impact development planned.
 - Circa 2.0 million tonnes per annum ore.
 - Production around 5 million ounces per year plus zinc and lead as by-products
 - Mine life to be determined with current reserve completion.
 - Production of silver/lead concentrate and silver/zinc concentrate for sale and treatment off-site.
 - Development capital investment circa A\$200m.

LATEST DRAFT MINE SITE LAYOUT



DEVELOPMENT EMPLOYMENT

- All positions at Bowdens Silver have been and will be advertised locally.
- Upon development, over 150 jobs to be created. Categories include:
 - Mining - material movement and management.
 - Technical Services - environmental, geological, engineering.
 - Processing and Plant Operations - grinding, milling, flotation, tailings.
 - General and Administration - accounting, health & safety, farm, support.
- Utilisation of local companies, suppliers and skills a priority.
- Strong training and support policy.

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COMMODITY USES

- Silver is the most versatile of all metals;
 - Electronics (mobile phones, TV's, superconductors, batteries, nano-silver applications, etc).
 - Medical uses (antibacterial, medical equipment, ointments, dressings, clothing, water purification, etc).
 - Silverware, coins, jewellery.
 - Photography
 - Solar energy (photovoltaic cells)
- Zinc – galvanising, die-casting, paints, cosmetics, textiles, inks.
- Lead – batteries, pigments, ammunition, weights, glass crystal, radiation protection.

ENVIRONMENTAL IMPACT STATEMENT

- Environmental Impact Statement (EIS) commenced and nearing completion.
- All items subject to the final project design as determined by the Feasibility Study.
- Items advanced include;
 - Noise, Visibility and Air
 - Terrestrial and Aquatic Ecology
 - Soils and Land Capability
 - Transport and Access
 - Health Risk
 - Aboriginal and Cultural Heritage
 - Surface and Ground Water
 - Social and Economic Impacts

ENVIRONMENTAL IMPACT STATEMENT

- Secretary's Environmental Assessment Requirements (SEAR's) issued by the Department of Planning and Environment.
- Dated 15th August 2017 and valid for 2 years.
- Comprehensive independent peer reviews to be undertaken.
- With the review process, the EIS is now scheduled for completion early 2018.



ENVIRONMENTAL IMPACT STATEMENT

DEVELOPMENT AND ASSESSMENT PROCESS



SPECIALTY CONSULTANTS

Area of Study	Primary Consultant
<u>FEASIBILITY STUDY</u>	
Engineering	GR Engineering
Geology, mine planning, process design	AMC Consultants
Drilling	Budd Drilling
Metallurgy	Graeme Campbell & Assoc
Tailings Storage	ATC Williams
Groundwater	Jacobs
Resource/Reserves	H & S
<u>ENVIRONMENTAL IMPACT STATEMENT</u>	
EIS Management	RW Corkery & Co.
Noise, Vibration & Blasting	SLR Consulting
Visibility	Richard Lamb & Assoc.
Air Quality	Ramboll Environ
Terrestrial Ecology	EnviroKey
Aquatic Ecology	Cardno
Soils and Land Capability	McKenzie Soil Management
Site Access	Barnson
Transport	The Transport Planning Partnership
Health Risk and Lead Management	EnRiskS
Aboriginal and Cultural Heritage	Landskape
Surface Water	WRM Water and Environment
Groundwater	Jacobs
Social Impact	Umwelt
Economic Impact	Gillespie Economics

WHAT INFORMATION IS COMING?

Bowdens Silver and its specialist consultants are continuing to progress through their respective assessment reports for inclusion in the Environmental Impact Statement (EIS).

The type of information that they will be able to provide to the community for discussion prior to the lodgement of the EIS includes:

NOISE – SLR Consulting

- Preliminary noise contours that display the predicted noise levels at various stages of the mine's operations.
- SLR will explain what mitigation measures or controls Bowdens Silver would need to adopt to achieve the required noise level contours. Eg. earth barriers, equipment enclosures, noise control equipment on mobile equipment, reduced equipment operating hours and dedicated waste rock placement areas during the course of the day.
- The predicted noise levels would be assessed under a range of meteorological scenarios including temperature inversions and winds.

WHAT INFORMATION IS COMING?

AIR QUALITY – Ramboll Environ

- Preliminary air quality contours will be presented displaying the predicted air quality at various stages of the mine's operation. The key contour is most likely to relate to the 24 hour PM₁₀ (particulate matter 10 micrometers or less in diameter) concentrations.
- Ramboll Environ will explain mitigation measures required to achieve health based criteria. Eg. road watering, dust suppression on crushers and screens, strategically positioned barriers to limit dust lift-off and equipment enclosures.

SURFACE WATER – WRM Water & Environment

- The features of the surface water system in the vicinity of the mine site (e.g. Blackmans Gully, Prices Creek, Walkers Creek and Hawkins Creek) will be described as well as the regional surface watercourse, Lawsons Creek.
- Mitigation strategies designed to avoid or minimise impacts would be presented, particularly with respect to dry periods and flood flows (a modelled flooding map will be displayed).
- Other surface water issues to be addressed would include:
 - The impacts upon existing water quality in the local and regional watercourses;
 - Diversion of clean water around mine components; and
 - A site water balance to identify the strategy to manage water from all sources.

WHAT INFORMATION IS COMING?

GROUND WATER – Jacobs

- The results of the groundwater modelling and its calibration with local bores will be presented.
- The report will quantify the impacts to the local and regional groundwater system over the life of the project and beyond so that the following key areas are identified, assessed and appropriate mitigation strategies are developed to manage:
 - Impacts to standing water levels (drawdown);
 - Groundwater inflow during and after open cut development; and
 - Impacts to groundwater quality.

TRAFFIC – The Transport Planning Partnership

- Current number of light and heavy vehicles using the roads in the Mudgee-Lue-Rylstone district and changes that would occur throughout the construction and operational phases.
- The effectiveness of the new proposed access road will be outlined with respect to minimising increases in traffic levels through Lue.
- A comparison between the existing and proposed traffic levels and the range of mitigation measures Bowdens Silver would adopt to minimise impacts on locals, road users and residents.

WHAT INFORMATION IS COMING?

ECOLOGY – Envirokey

- Detailed maps will be displayed depicting the vegetation communities within the mine site and locations where threatened fauna species have been detected.
- Information will be presented regarding the biodiversity value of the areas to be disturbed and the management measures to be adopted including minimisation of disturbance within high biodiversity areas, implementation of a biodiversity offset strategy for unavoidable disturbances, and the rehabilitation strategy for the disturbed areas.

HEALTH & LEAD – EnRiskS

- Detailed information will be available on the potential human health risks, such as those associated with air pollution (including lead), noise, vibration, and water, the available baseline concentrations/condition for the potential risks, identification of the exposure pathways, a toxicity and response assessment in comparison to relevant guidelines and criteria, and a quantified assessment of human health risk.
- The methodology and approach to the assessment will be explained as well as the principal assumptions relied upon.



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Community



INFORMATION SESSIONS

- **Community Information Sessions – 18th & 19th of June 2016**
 - Held in Mudgee and Rylstone to provide an overview of the project and discuss employment opportunities.
 - Over 100 attendees and over 200 job applications.
- **On Site Open Day – 20th of November 2016**
 - Approximately 50 attendees.
 - Presentation and Q&A session.
 - All Bowdens Silver staff in attendance including information displays.
- **Community Information Session – Lue Hall – 7th of May 2017**
 - Approximately 70 attendees.
 - A range of speciality consultants present across a range of topics, including;
 - EIS Management,
 - Surface & Ground Water,
 - Social Impact,
 - Health Risk & Lead Management,
 - Noise, Vibration & Blasting

INFORMATION SESSIONS

- **Various other Information Sessions and Exhibitions including;**
 - **Gulgong Chamber of Commerce**
 - **Mudgee Chamber of Commerce**
 - **Rylstone Kandos Business & Tourism**
 - **Rotary Club of Mudgee Sunrise**
 - **Rylstone Show**
 - **Local Schools**
- **Future information sessions will be held prior to EIS public exhibition to share outcomes and gather community input regarding completed technical studies.**

COMMUNITY

- **“Open Door” policy with neighbours and interested stakeholders.**
 - On-site and off-site face to face meetings.
 - Phone and email interactions.
- **Quarterly newsletters.**
- **Open Days – on and off site.**
- **Mail outs, newspaper notices and phone calls to keep community aware of project and activities that are occurring.**
- **Since May 2017, Social Impact Assessment work has included over 2000 letters and information sheets distributed and approximately 230 local one on one interviews, phone calls and door knocks.**
- **Updates on company website which also has a comprehensive Q&A portal.**

OTHER INFORMATION

- One on one local residents and wider community member site visits and presentations.
- Lue Bushfire Brigade and Cudgegong Rural Fire Service
 - Bushfire management planning, volunteering opportunities, maps, water & equipment assets and access in emergencies.
- Registered Indigenous Groups
 - Aboriginal artefact site surveys.
 - Project and exploration updates.
- Local businesses and contractors – on and off site visits.

EDUCATION

TERTIARY INSTITUTIONS (Universities, Colleges, TAFE)

Earth sciences

Geology

Mine Engineering

Processing

Environmental Sciences

SECONDARY SCHOOLS

Agriculture

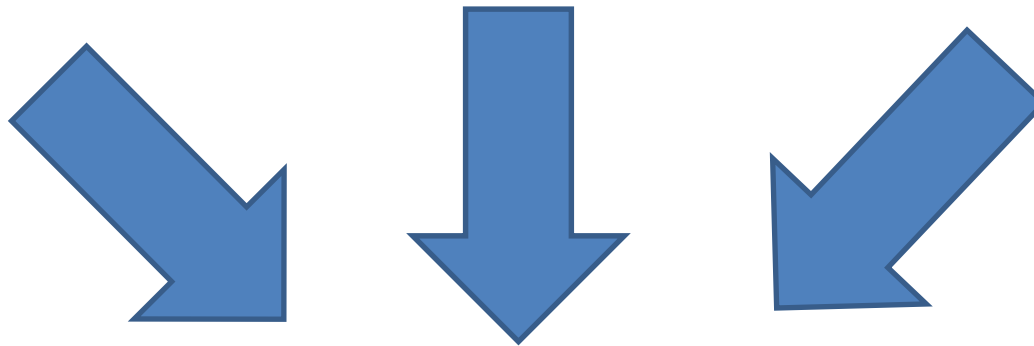
Applied Science

Earth & Environmental Science

PRIMARY SCHOOLS

Agriculture

Nature & Geography



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EDUCATION

- Lue Public School - IT sponsorship, water resources, garden, educational support & excursions.
- Kandos High School – offer of educational support & excursions.
- Kandos Public School – playground and educational support.
- Rylstone Public School – infrastructure and educational support.
- University of New South Wales – post graduate PhD study on detailed geology of Bowdens Silver deposit and surrounds.
- Local trainee program opportunities to be commissioned with transition into mine development (including with local secondary schools).



COMMUNITY INVESTMENT

- **Successful policy for hiring local businesses and local contractors located with the Mid-Western Regional Council local area.**
- **111 local businesses and local contractors have helped at Bowdens Silver providing a diverse range of goods and services.**
- **In excess of \$2,000,000 paid to businesses and contractors within the local area by Bowdens Silver.**
- **In excess of \$2,500,000 in local salaries paid to staff.**

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SPONSORSHIP POLICY

- **Community**

Support to improve social facilities and areas of greater benefit for regional communities such as the development of academic skills, infrastructure enhancements and improved amenity and environment;

- **Sport**

Support sporting organisation promoting team work, health and the wider social function to local communities;

- **Health and Safety**

Support for organisations that provide rescue and emergency services and that promote safe behaviour; and

- **Arts and Culture**

Support for projects in areas such as community events, cultural heritage, ethnic and indigenous cultural initiatives and community arts programs.

COMMUNITY IDEAS AND SUBMISSIONS

LOCAL SPONSORSHIPS

- Mudgee Wombats Rugby
- Rylstone Kandos Show
- Mudgee Show
- Kandos CWA
- Lue Public School
- Kandos Public School
- Rylstone Public School
- Kandos High School
- Rylstone Street Feast
- Mudgee District Netball Association
- Lue Darts
- Mudgee Endurance Riders
- Kandos PCYC Youth Moto Workshop
- Waratahs v Brumbies Rugby in conjunction with MWRC.

FURTHER INFORMATION

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www.bowdenssilver.com.au

Planning and Environment

<http://www.planning.nsw.gov.au>

<http://majorprojects.planning.nsw.gov.au>

Resources and Energy

<https://www.resourcesandenergy.nsw.gov.au>

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