



MT TODD

Mt TODD GOLD PROJECT

Community Update

27 October 2012



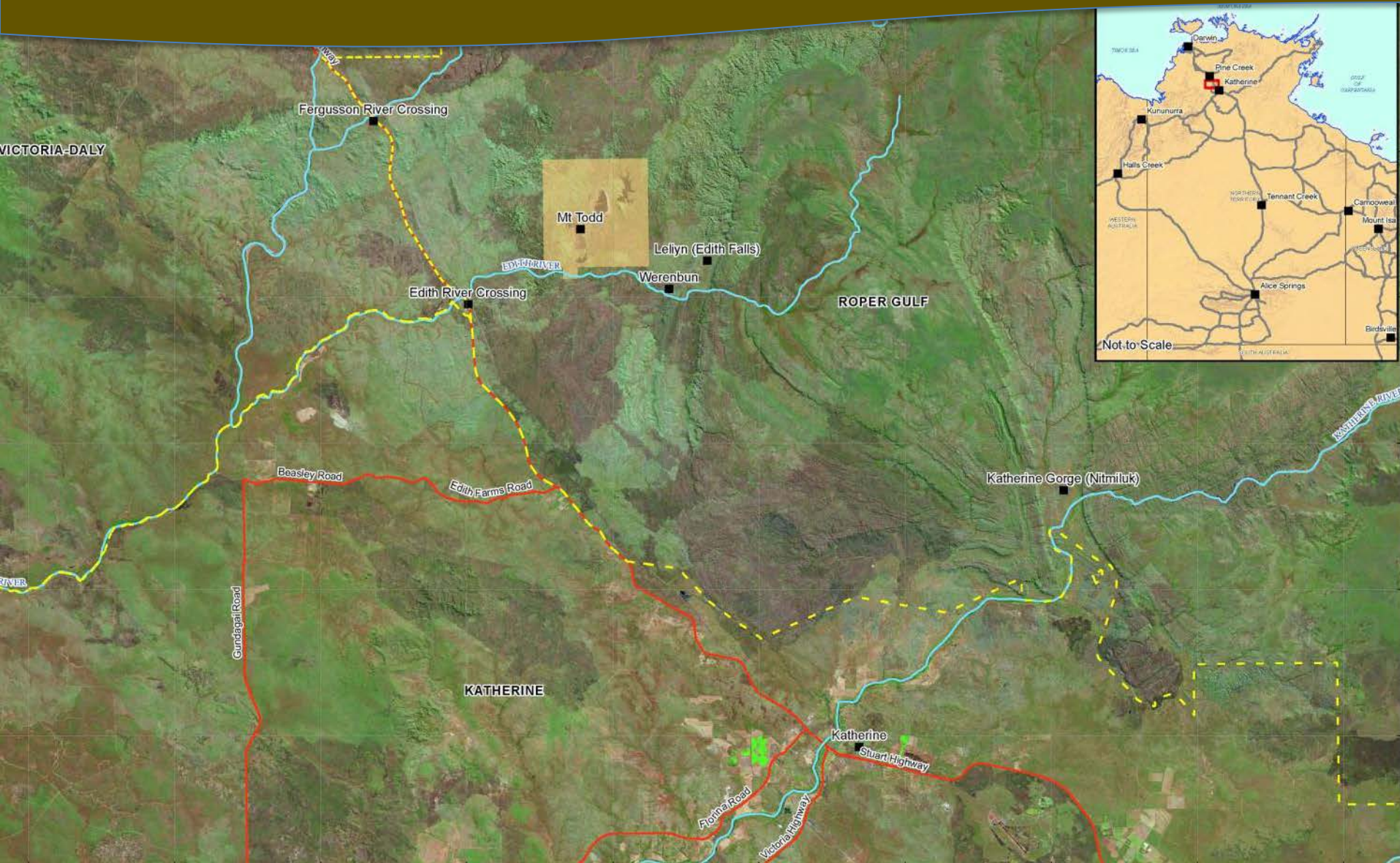
Mt Todd Gold Project

- Mt Todd is a “Brown Field” site.
- 2006 - Vista Gold acquired mining and exploration leases.
- Nov 2010 – NT Government and Vista Gold renewed agreement for care and maintenance of the site.
- Vista Gold has already invested \$52 Million into the project.
- Vista Gold is currently working to complete evaluations and environmental authorisations for the site with a view to redevelop Mt Todd as a world-class gold mine.

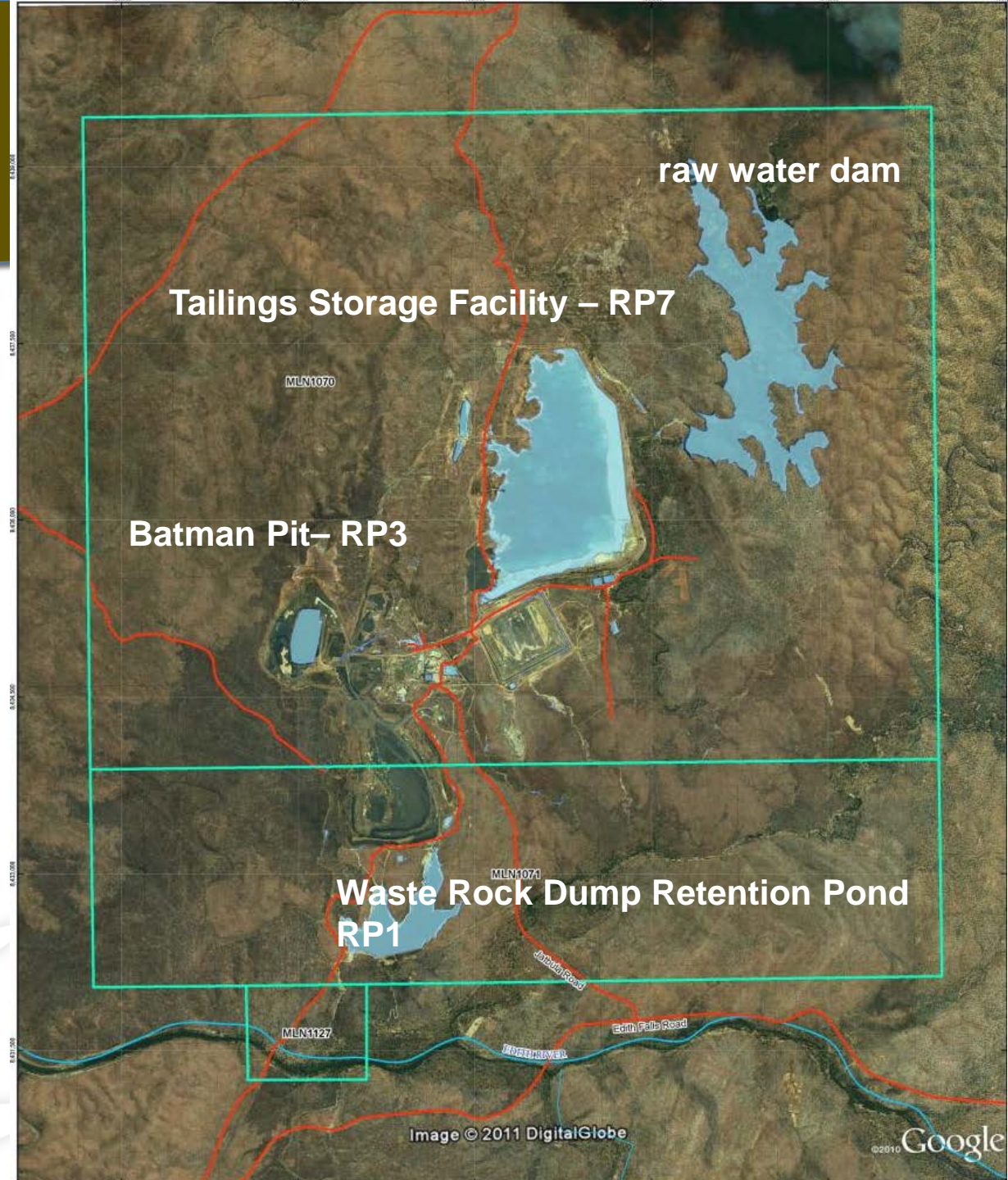
Mt Todd Gold Project

- The project site includes several mineral leases covering approximately 5,365 ha.
- Subject to Government approvals and a final investment decision, mining could commence in 2015 – 2016 following a 2 year construction period
- Planned mine operations for approx. 15 years
- Plans include rehabilitation post mining.
- New technologies, an expanded exploration program and an improved gold price are keys to the future development of this site.

Locality Map



Site Map



Local Commitment

- Vista Gold is working in partnership with the Jawoyn Association.
- Committed to establishing a local workforce with workers living in Katherine and Pine Creek.
- Source goods and services locally as long as they are competitive.
- Currently employs 40 staff on site.
- Construction workforce 400 – 500 employees.
- Ongoing operations workforce 270 – 300 full time jobs.
- Committed to local training, education and development.

Community Consultation

- Environmental Impact Statement (EIS) – consultation with stakeholders and communities commenced in 2011.
- The EIS will recommend ways to reduce or remove potential negative impacts and enhance positive impacts from the Project.
- Established channels for communication – www.mttodd.com.au.
- Participates on the NT Government convened **Mt Todd Mine Site Reference Group**. Members include: NT Government, Jawoyn Association, Katherine Town Council, AFANT, Environment Centre NT, ERISS and Minerals Council.

Challenges

- Legacy issues of the previous operators.
- Previous operators were faced with low gold prices, high operating costs and lower than expected processing rates.
- Water management is the biggest environmental issue facing Mt Todd.
- Since the mine ceased operation in 2000, contaminated water has been re-directed and stored in the Batman Pit (RP3) and the Tailings Storage Facility (RP7).
- The site has collected 12.5 GL of contaminated water, 11 GL of which is in the Batman Pit.

Challenges

- The site is almost out of storage capacity.
- To protect the environment this water needs to be treated.
- Before the mine can re-open, the treated water must be removed from site.



Water Management - History

- Discharges (both controlled and uncontrolled) to the Edith River have occurred over the previous 10 years from RP7 and RP1.
- Discharges occurred from RP7 up to 2004 and after that, only from RP1.
- In terms of frequency and volume, RP1 is the greatest contributor for controlled and uncontrolled discharges.
- All investigations since 2003 have found no discernible evidence of downstream impact.

Regulatory Environment

- Release of water from site is governed by a Waste Discharge Licence (WDL) issued by NT Government.
- The WDL prescribes the conditions for the release of water from site, pursuant to the Water Act.
- The Licence requires monitoring and assessment for any potential impacts from the mine lease.
- WDLs are renewed regularly and Vista Gold is currently working with the NT Government for the issue of a new WDL.

Water Quality Assessment

Vista Gold has and continues to undertake a number of investigations for assessing water quality in the Edith:

- Determination of the mixing zone for Mt Todd discharge.
- Ecotoxicological studies to assess downstream impacts from the mine discharge.
- Macroinvertebrate and sediment studies to determine potential downstream impacts from the mine discharge.
- Investigations into the metal chemistry at the site and in the Edith.

Current Water Quality

- Water in the natural environment has a pH level of around 7 or neutral.
- Water currently stored on site has a low pH level (acidic) and a high concentration of dissolved metals.
- Vista Gold aims to treat stored water by raising pH to a level where dissolved metals are reduced.

Water Treatment Solution

- Vista Gold has developed an approach in conjunction with Micronised Mineral Solutions to treat the water directly in Batman Pit.
- This treatment involves the application of very finely ground calcium carbonate followed by quicklime.
- Laboratory and on-site tests conducted using this approach showed a significant rise in pH and significant reduction in dissolved metal concentrations.

Water Treatment Solution

- Vista Gold has invested \$6 million into this treatment process and a further \$4 million into dewatering infrastructure.
- The treatment process will take approximately 90 days to complete and the treated water proposed to be released over two wet seasons.
- Water will only be released when the flow in the Edith River is sufficient to achieve a dilution rate that will protect water quality and the surrounding environment.

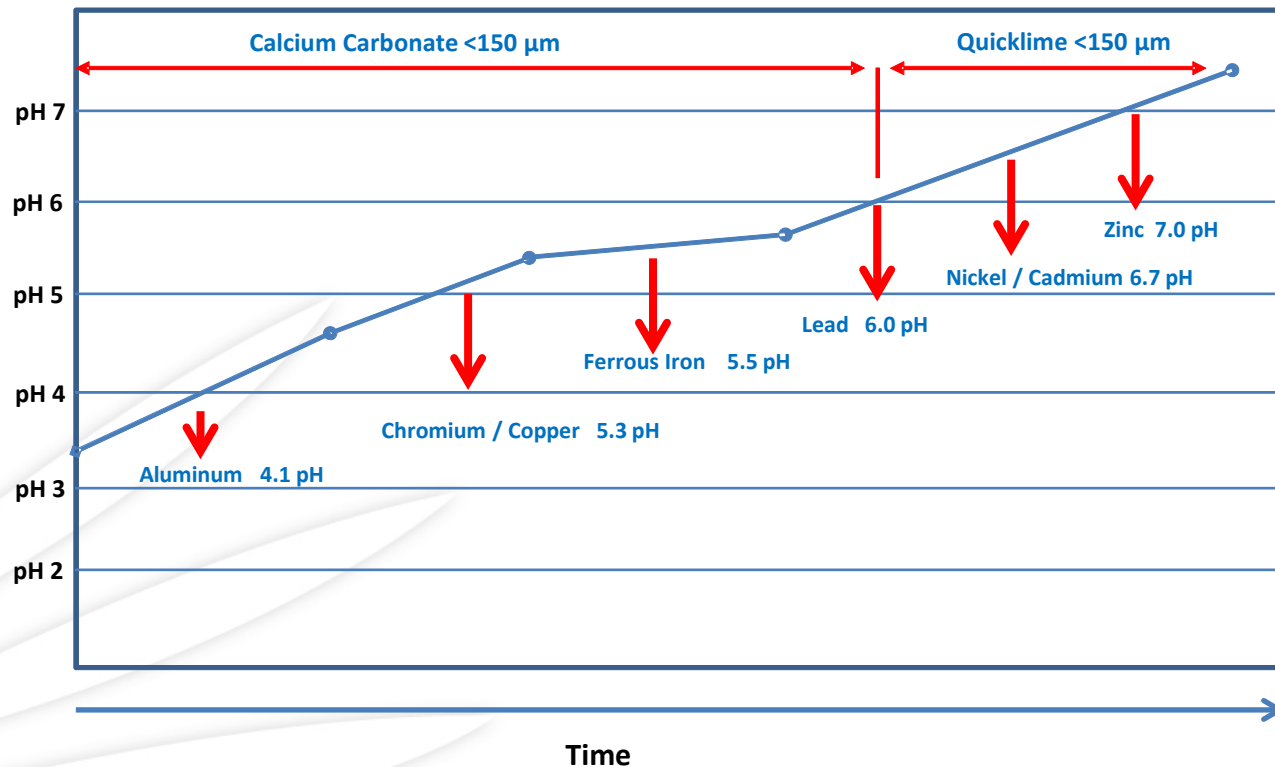
Water Monitoring

Vista Gold has established the following systems for monitoring the quantity of water released from site:

- Flow in the Edith River measured by Telemetry
- Telemetry signals “back to the pumping system”
- Fully automatic control mechanism to control the flow rate and maintain approved dilution ratio
- Discharge system equipped with flow measuring and recording devices
- Loss of radio signal will shut the discharge off, using a “Fail Safe” system

On Site Water Treatment

Treatment of current waters with Calcium Carbonate and quicklime follows principals of stoichiometry. The figure below shows the rise in pH over time following addition of Calcium Carbonate and quicklime as well as precipitation of individual metals at corresponding pH's.



Test Results

- Bench scale and pilot testing showed four metals (Al, Cr, Fe, Pb) were reduced to concentrations below WDL requirements.
- Significant reductions in all other metals have also been achieved.
- Laboratory analysis of RP3 treated water 12 months following treatment showed a further reduction in metal concentrations.

Decant Pond Testing

The large scale pilot trial was conducted during May 2012 using 30,000,000 L of RP3 water transferred to the decant pond on site.



Decant Pond prior to commencement of in-situ pilot trial.



Decant Pond during addition of $< 150 \mu\text{m}$ limestone (stage 2) via a venturi nozzle.

Water Treatment - Batman Pit

The Sheer System that is used to inject Calcium Carbonate and Quicklime along with water into RP3 for distribution.



Water Treatment - Batman Pit



Water treatment injection of Calcium Carbonate

Long Term Water Treatment

- This process of dewatering the Batman Pit will only apply for the next 2 years.
- Vista Gold will build a Water Treatment Plant for ongoing water management for the life of mine.
- Vista Gold will continue to work in accordance with a WDL and international environmental standards.



This Wet Season

- Additional diversion drains are in place to divert clean water around site.
- The key collection/storage facility will be RP7.
- RP1 water levels will be maintained as low as possible and pumped to Batman Pit via the existing water treatment plant.
- Plans in place to treat excess water before transferring it to Batman Pit using existing lime treatment facilities.
- Vista Gold will continue to monitor and report on water quality to the NT Government.

Questions?



For more information

www.mttodd.com.au

Stakeholder Database

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