

# TINTINA RESOURCES

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## Doing It Right From the Beginning Developing the Black Butte Copper Project

December 2015 AEMA Spokane



# Important Cautionary Notes

**Technical Information:** Under National Instrument 43-101 Standards of Disclosure for Mineral Projects, the Qualified Person for this presentation is Jerry Zieg, who has reviewed, approved, and verified its contents. Please see the technical report entitled "Updated Technical Report and Preliminary Economic Assessment for the Black Butte Copper Project, Montana" dated July 12, 2013 (the "PEA"), which is available on SEDAR, for more information. *The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.*

**Forward-Looking Statements:** This presentation by Tintina Resources Inc. (the "Company") includes certain disclosure which constitutes "forward-looking information" or "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and Canadian securities legislation. Forward looking statements are often identified by words such as: expects, plans, anticipates, believes, intends, estimates, projects, assumes, potential, or will, would, may, could or should.

These forward-looking statements include statements regarding plans and intentions with respect to exploration and development of the Company's properties, including timelines, anticipated results, the Company's operations and financial condition in future periods, anticipated completion of feasibility and other studies and their impact on project economics and scope, timing of approvals and permitting and other milestones and sufficiency of funding to complete planned activities. Estimates of mineral resources are also forward-looking statements in that they involve estimates of the mineralization that would be encountered, based on interpretation of drilling results and certain assumptions, if a deposit were developed and mined. Forward looking information relating to the Company's Black Butte Copper Project also includes the Preliminary Economic Assessment (PEA), including estimates of capital and sustaining costs, anticipated internal rates of return, mine production, estimated recoveries, mine life, estimated payback period and net present values.

In making the forward-looking statements, the Company has applied certain factors and assumptions that the Company believes are reasonable, including those set out in the PEA, that the Company is able to obtain required government or other regulatory approvals and permits and any required financing to complete the Company's planned activities, that actual costs of planned activities will be consistent with management's expectations, that the Company is able to procure equipment and supplies in sufficient quantities and on a timely basis, that actual results of exploration activities are consistent with management's expectations, that the proposed mine plan and recoveries will be achieved, that capital costs and sustaining costs will be as estimated, that the assumptions underlying mineral resources estimates are valid and that no unforeseen accident, fire, ground instability, flooding, labor disruption, equipment failure, metallurgical, environmental or other events that could delay or increase the cost of development will occur.

However, the forward looking statements are subject to numerous risks, uncertainties and other important factors that may cause actual results to differ materially from those expressed or implied in such forward-looking statements, including any of the assumptions and factors set out in the PEA proving to be invalid or varied, actual results of the Company's exploration activities being different than those expected by management, uncertainties involved in the interpretation of drilling results and geological tests and the estimation of mineral resources, that the future price of copper will decline, the need for cooperation of government agencies, native groups and other stakeholders in the development of the Company's properties, risks related to mineral properties being subject to prior unregistered agreements, transfers or claims and other defects in title, risks of operations such as accidents, equipment breakdowns, inadequate insurance or inability to obtain insurance, bad weather, potential litigation, non-compliance with environmental and permit requirements, unanticipated variations in geological structures, grades or recovery rates, unexpected cost increases, fluctuations in metal prices and currency exchange rates, delays in obtaining or inability to obtain required government or other regulatory approvals or permits or required financing, and the inability to procure equipment and supplies in sufficient quantities and on a timely basis. Readers are cautioned not to place undue reliance on forward-looking statements. The Company does not intend, and expressly disclaims any intention or obligation to, update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.

This presentation is not, and is not intended to be, an offer to sell or the solicitation of an offer to buy any security of Tintina in any jurisdiction. This presentation is not an offering memorandum.

## Black Butte – Project Location



- 17 miles North of White Sulphur Springs
- Underground mine, massive sulfide
- ~15 year mine life
- 200 employees & 50 contractors
- \$218,000,000 capital investment (in PEA)
- Located wholly on private ranch land
- Strong local community and regional support



We are committed to our environment, improving our region and building a mine that fits well with our community.



## *Tintina and Black Butte Project History*

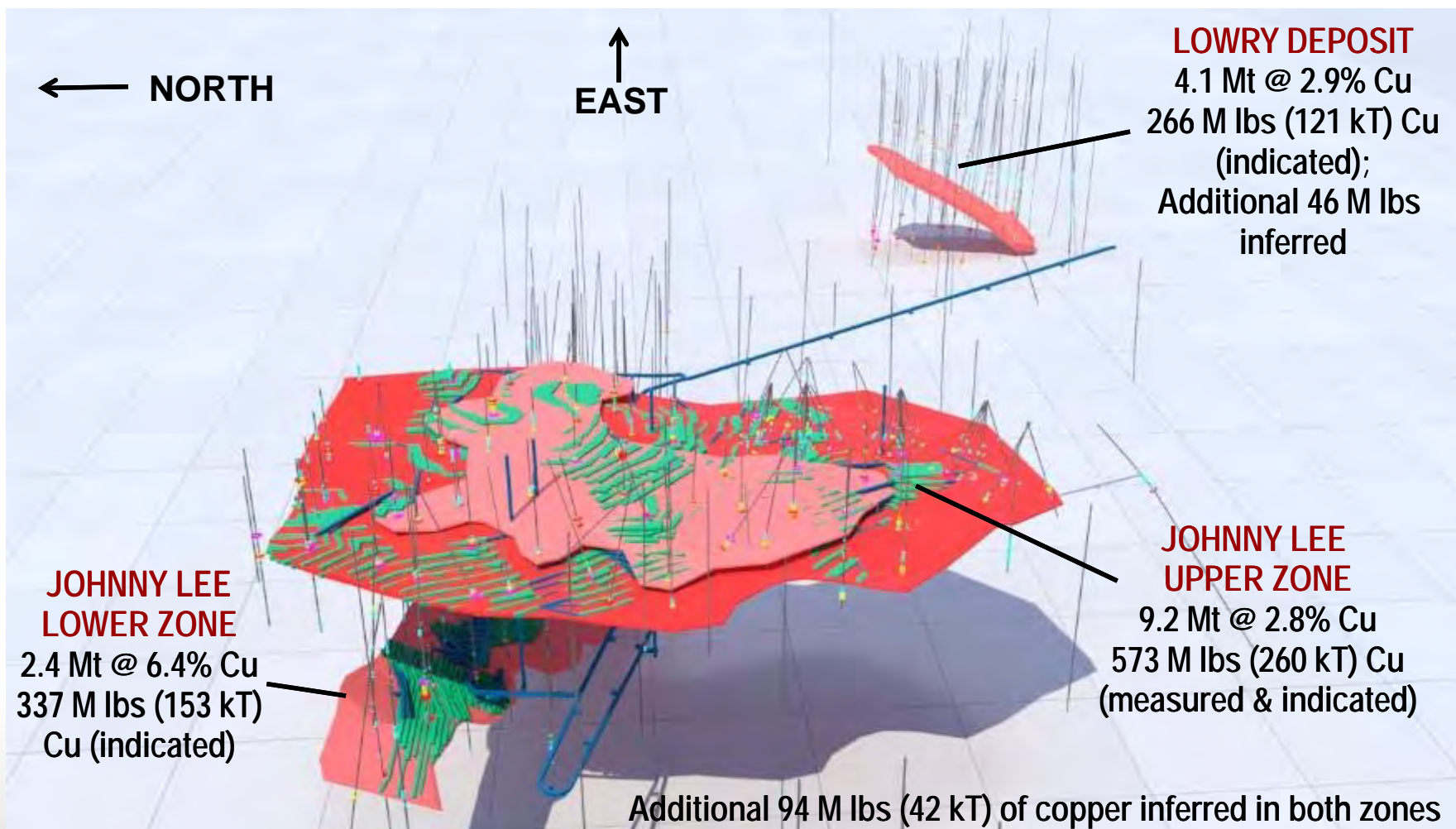
- 2008 – NovaGold (NG) begins negotiations with resource owners
- April 2009 – NG forms Tintina Resources Inc. (TRI); *Gains Electrum Strategic Resources as primary investor - \$5 M 2009; \$5 M 2010*
  - *Initial focus on Alaskan properties*
- May 2010 – TRI completes negotiations with Black Butte landowners
- Sep 2010 – TRI drill twinned 6 historic core holes
- January 2011 – *Gains Quantum Partnerships and \$35 million*
- 2011 -- 2012 – TRI focuses on upgrading resources through drilling
- 2012 -- 2013– TRI completes Preliminary Economic Assessment (PEA) on Johnny Lee deposit and later updates PEA after a resource upgrade
- 2013 - Gained permit to build a 5000 foot exploration decline; declined it to nullify a lawsuit by MEIC/Earthworks/Upper Missouri Waterkeepers
- 2014 – *Gains Sandfire Resources as primary investor (36%) and \$16 M*
- 2015 -- *Sandfire buys QP's position and ups ownership to 57%*
- 2015 – TRI focuses on completing Mine Operating Permit application
- Dec. 2015 – TRI submits Mine Operating Permit application to MT DEQ

## Black Butte Resource, Geometry, and Access

**GLOBAL in-situ M&I Resource : 15.7 Mt @ 3.4% Cu; 1,176 M lbs (534 mT) Cu**

**Johnny Lee deposit in-situ resource – 11.6 Million tonnes @ 3.6% Cu;**

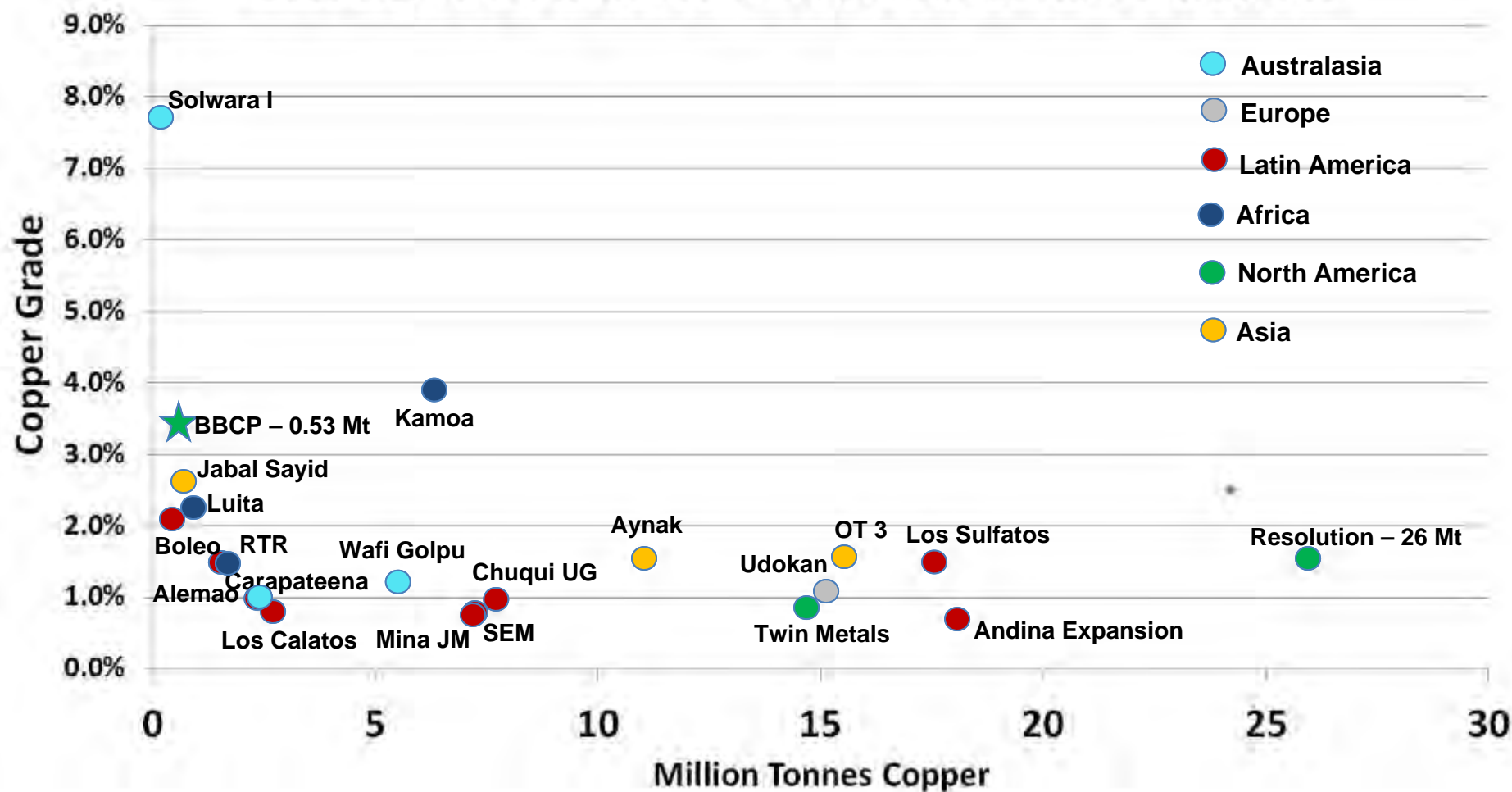
**910 M lbs (413 kT) Cu**





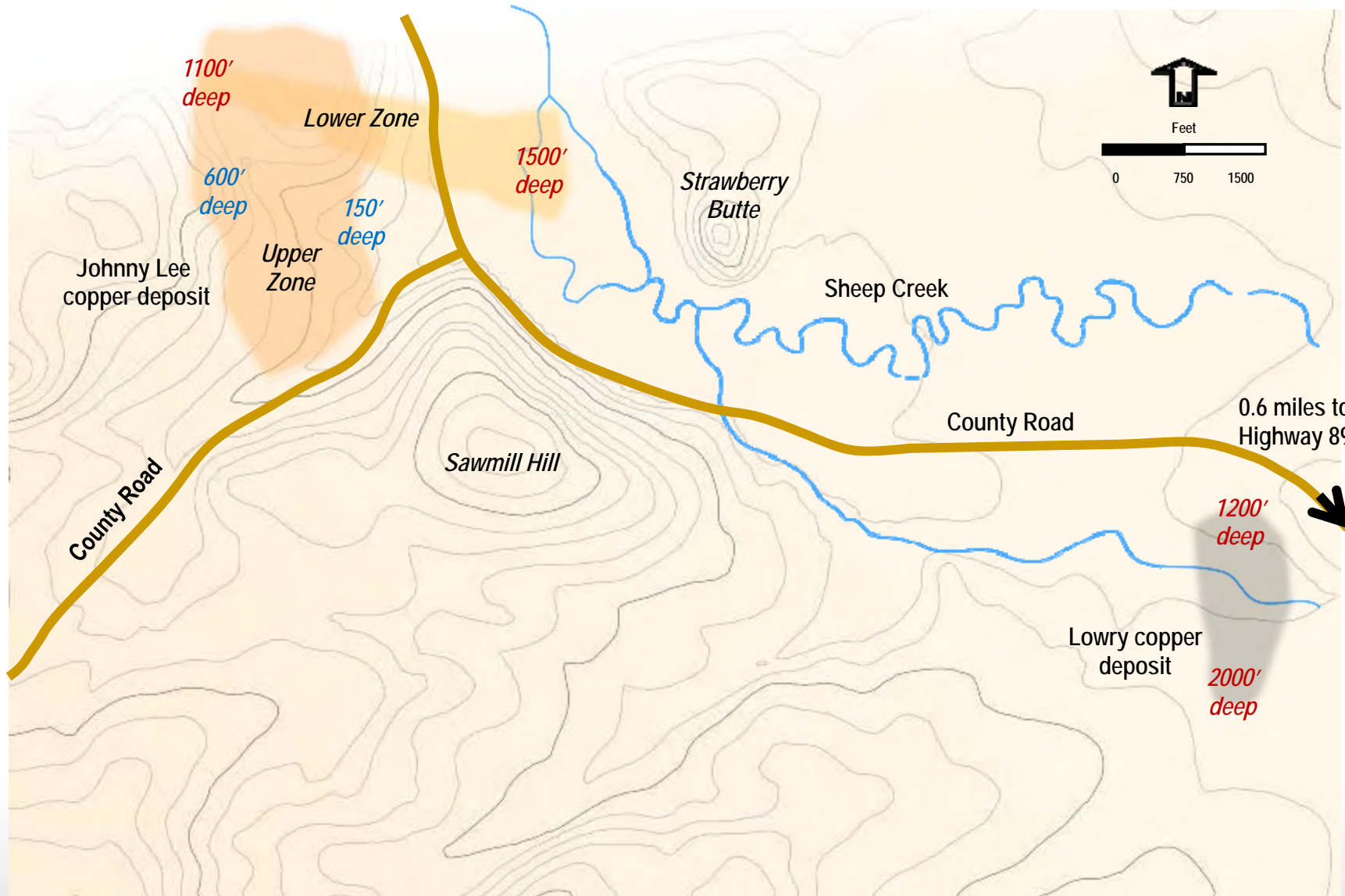
## Black Butte – Comparison to High Grade World Deposits

Grade vs Size for 20 Highest Grade Copper Deposits Under Development

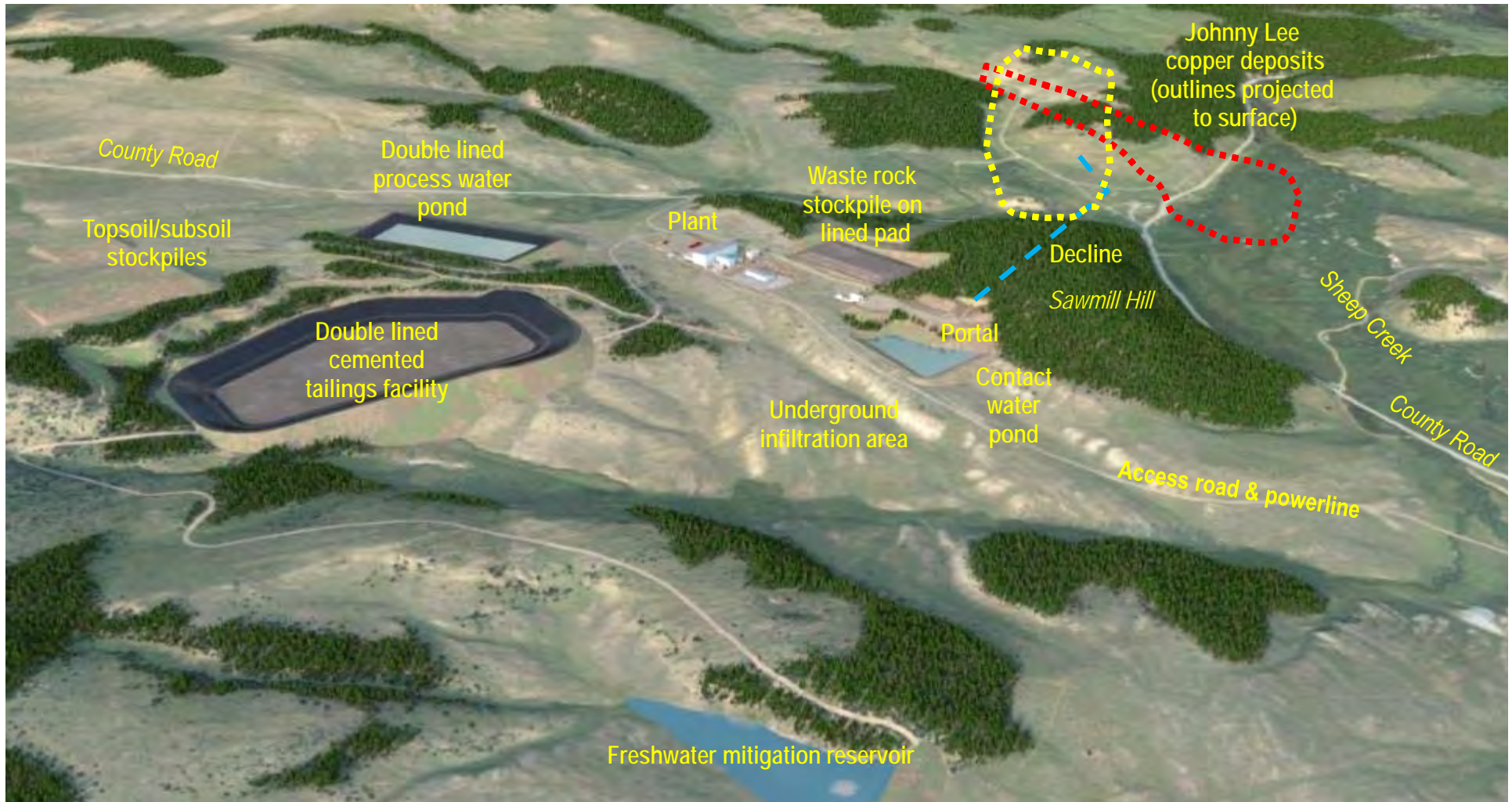




## Black Butte – Deposit Locations and Depths



## Black Butte – Proposed Mine Facility Layout





## ***Cemented Paste Tails***

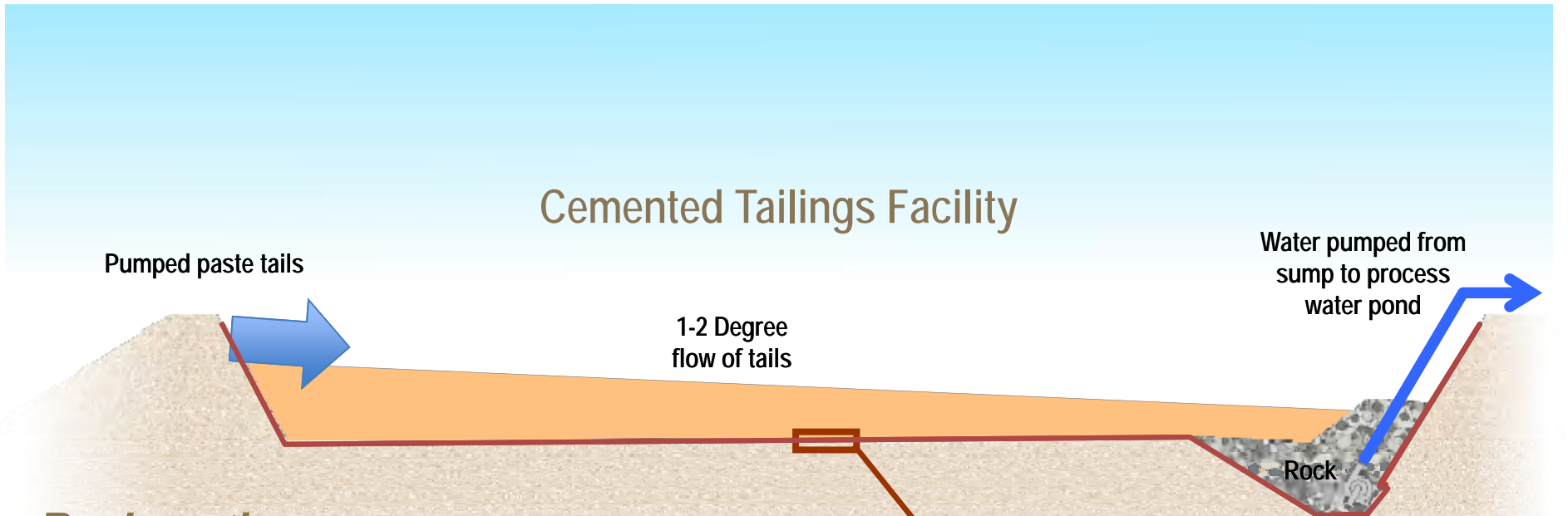
- *Will use for both surface and underground*
- *Combination of cement, fly ash, and slag to bind tails*
- *Results in non-flowable material*
- *Eliminates concerns of pond breaching and long term issues*
- *Allows for quick reclamation*
- *Unique in the industry for surface tailings management*
- *Improving on currently used and proven techniques*



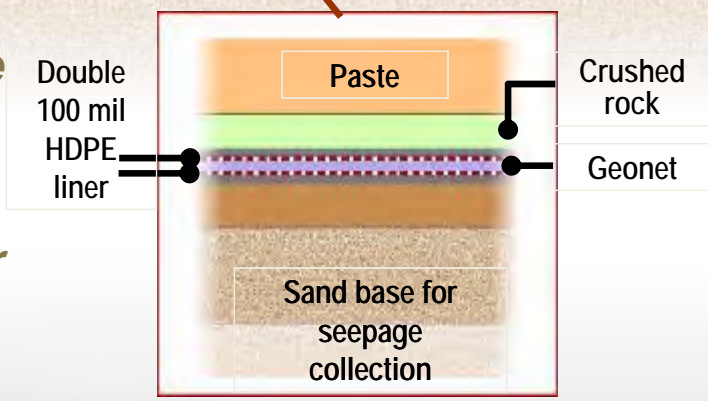
## Black Butte – Cross section of Cemented Tailings Facility

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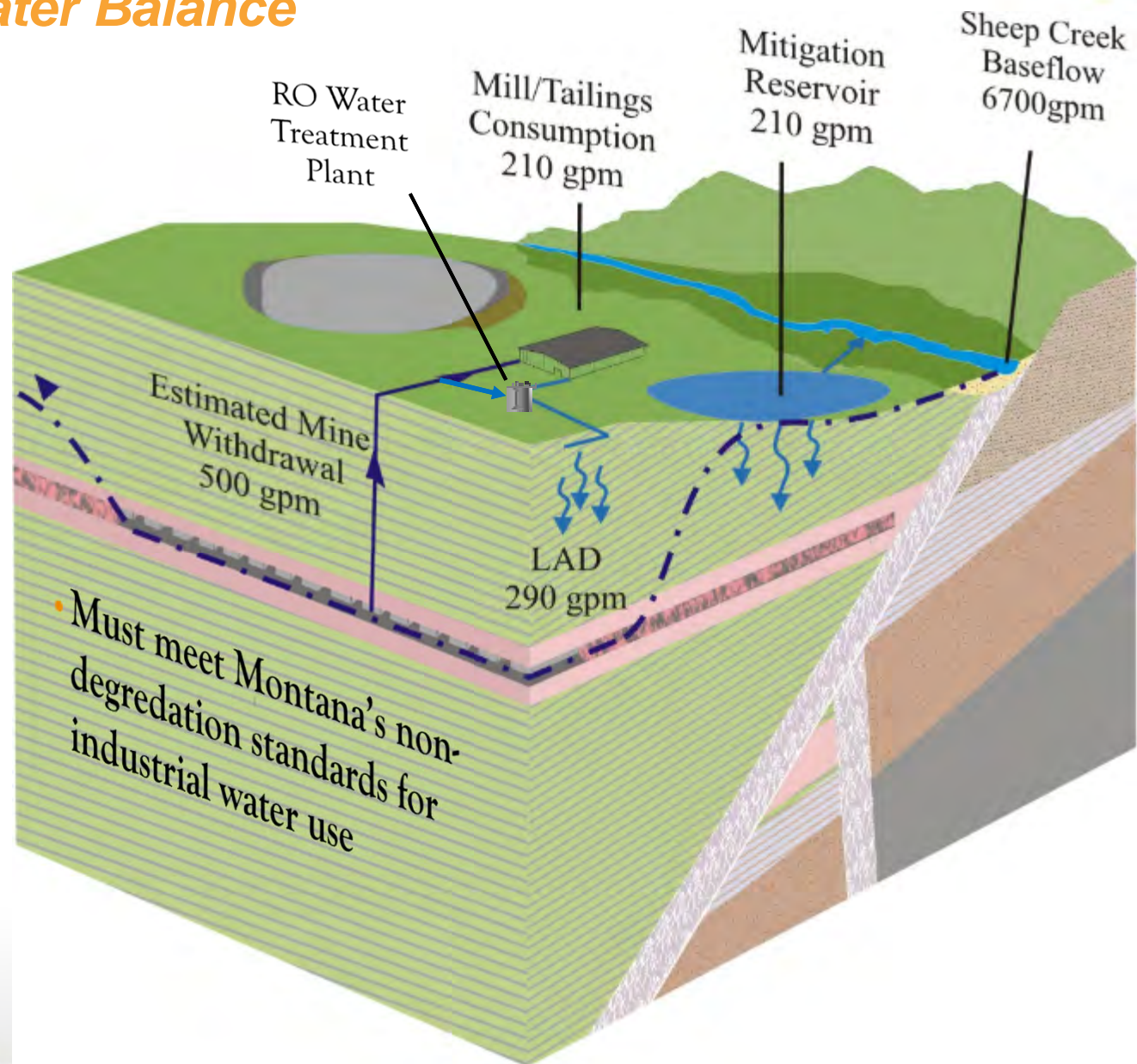
- **Reclamation**
  - *Weld overliner to lower double liner*
  - *Cap facility with >4 feet of fill*
  - *Cover with sod and grass over*
  - *Becomes an 80 acre pasture*





## Black Butte – Water Balance

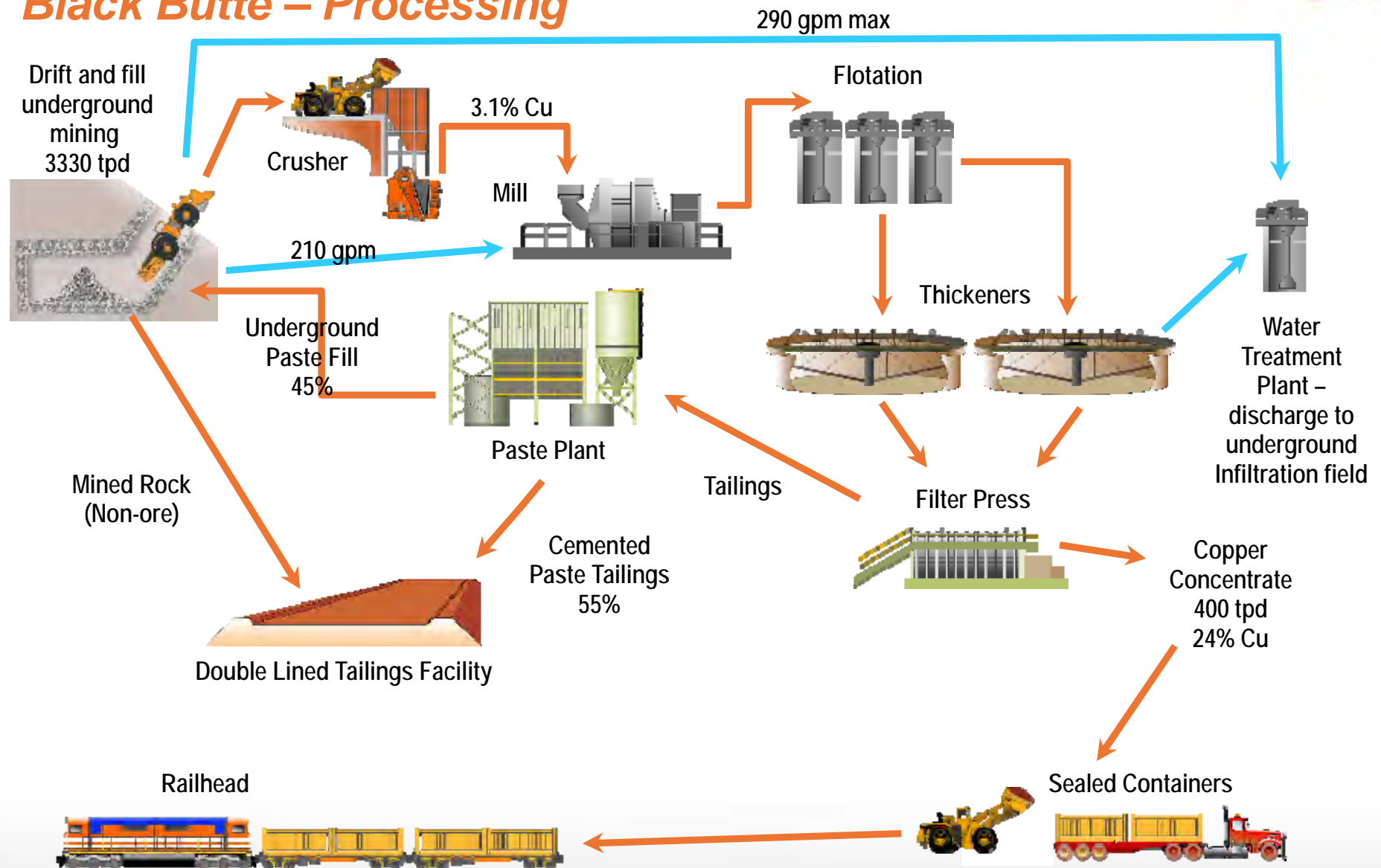
- *Closed basin for water rights*
- *Mill uses about 0.5 cfs (210 gpm consumptive use)*
- *Sheep Creek base flow is 15 cfs (6700 gpm)*
- *Must mitigate for all consumptive use by retiring other surface use*
- *All discharge back to groundwater in an underground infiltration system after RO treatment*
- *Low connection between surface flows and local groundwater contribution, so net positive for stream*



# TINTINA RESOURCES

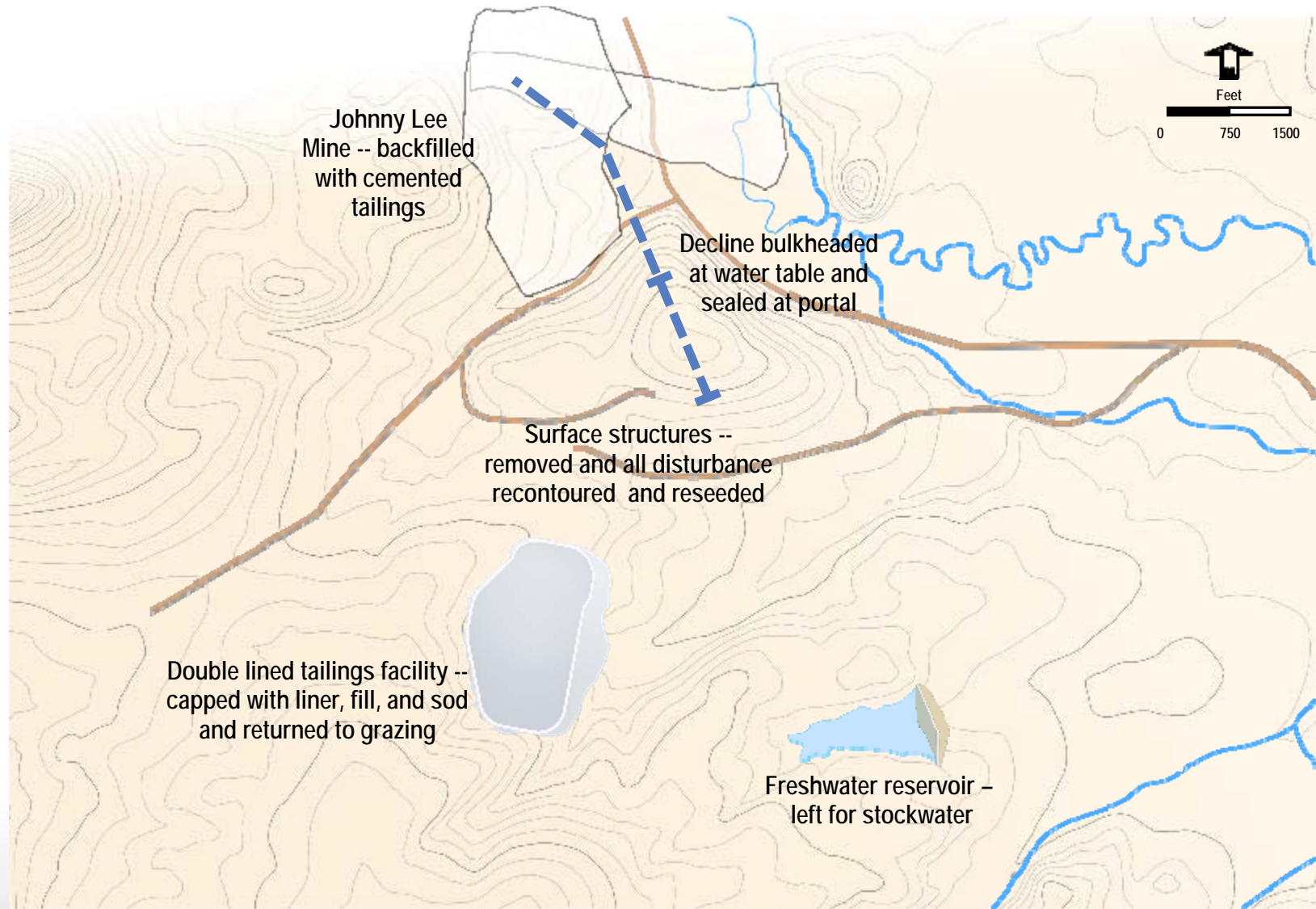
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## Black Butte – Processing





## Black Butte – Reclamation Plan



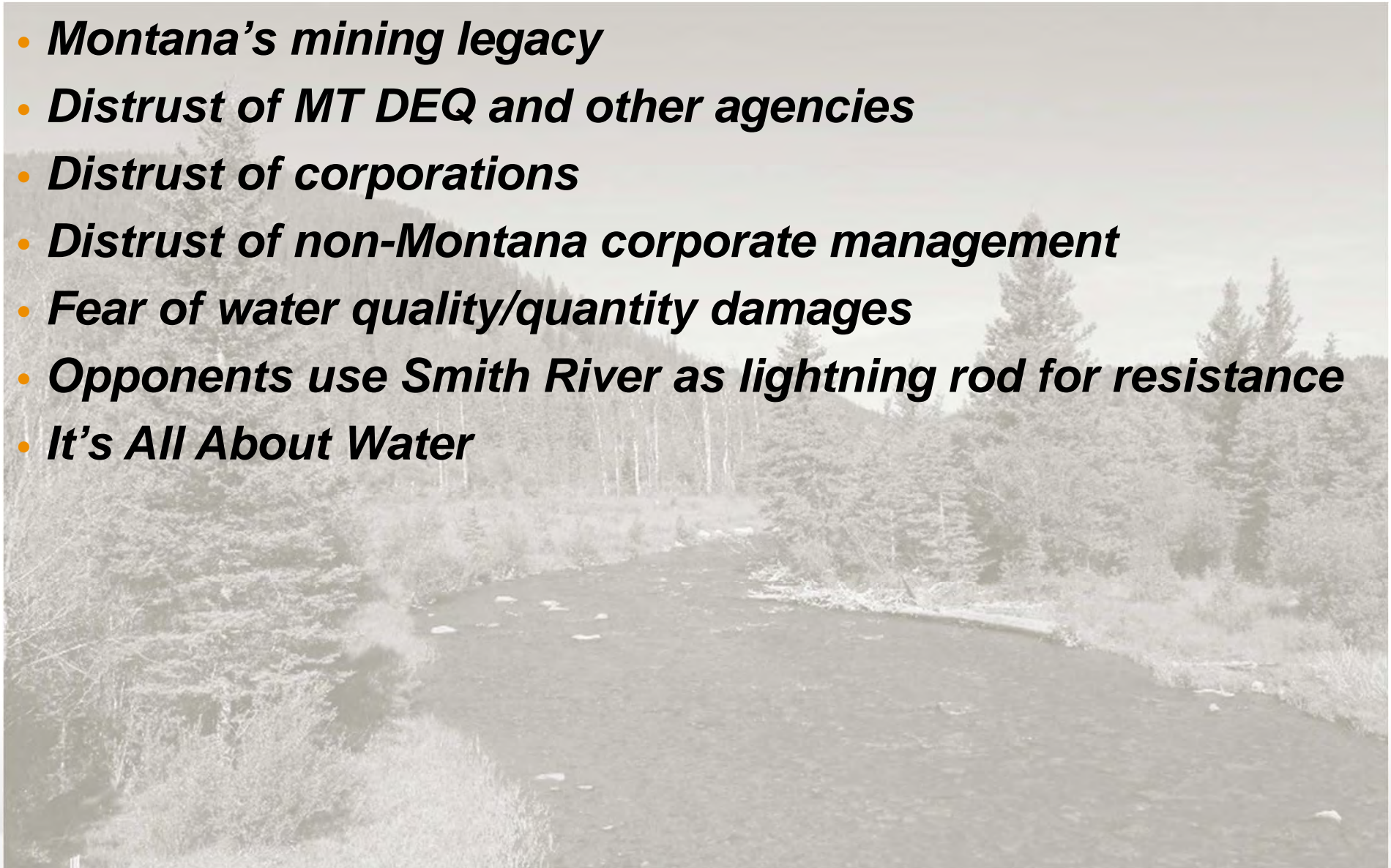
## *Black Butte – Environmental protection*

- ✓ *Mine access/facilities outside Sheep Creek Valley*
- ✓ *All mine access far above the water table and mine workings*
- ✓ *Paste backfill underground and cemented tailings on surface*
- ✓ *All waste rock put in surface cemented tailings facility*
- ✓ *All water used in operation comes from mine dewatering*
- ✓ *Reverse osmosis water treatment plant for all discharged water*
- ✓ *Underground infiltration disposal for all water – no surface discharge*
- ✓ *Mitigation of surface water use for all water used (net positive flow)*
- ✓ *Ventilation fans installed underground*
- ✓ *Sealed containers for concentrate shipments*
- ✓ *Extensive baseline testing (>4 years) and hydrologic modeling*
- ✓ *Extensive waste rock characterization*
- ✓ *Reclamation returns virtually entire 270 acres of disturbed surface back to grazing*



## *Black Butte – Public Relations Challenges*

- *Montana's mining legacy*
- *Distrust of MT DEQ and other agencies*
- *Distrust of corporations*
- *Distrust of non-Montana corporate management*
- *Fear of water quality/quantity damages*
- *Opponents use Smith River as lightning rod for resistance*
- *It's All About Water*





## *Black Butte – Public Relations Strategy*

- **Balanced non-partisan Montana-based PR team**
- **Strong focus on community**
  - *Great local support*
- **Many public presentations, BBQ's, event sponsorships**
- **Engagement with regional business/community leaders**
- **Engagement with recreational interests –**
  - *Fisherman, floaters, hunters, hikers and many others*
- **Messaging on radio, TV, billboards, newspapers**
- **Intense social media campaign**
- **Website upgrading, virtual tours, graphics, videos**
- **Digital marketing analysis**
- **Strong open door policy**
  - *Scheduled presentations and tours first day of every month*
  - *Presentations and tours by appointment anytime*

## *Black Butte – Positive impacts*

- **Construction period 2 to 3 years; 150 to 200 employees**
- **Mine operation 11 to 14 years; 240 employees**
- **Reclamation 2 to 3 years; 25 employees**
- **Hardrock Mining Impact Planning**
  - *Community infrastructure improvements paid for in lieu of future taxes*
- **Preliminary Economic Assessment (2013)**
  - *Base Case \$3.05/pound Cu price*
  - *Post tax NPV \$110 million; IRR 20.2% at 8% discount rate*
  - *Capital Cost: \$218 million*
  - *\$66.48/tonne estimated operating costs*
  - *4.7 year payback*
  - *LOM average mill grade estimate - 3.1% Cu*
  - *LOM average Cu recovery estimate - 88.3%*
  - *LOM average cash costs estimate - \$1.81/lb Cu*
- **30,000 tonnes Cu production per year; \$200 million revenue**



## Black Butte - Next Steps

- *MOP (Mine Operating Permit) application submitted in 4<sup>th</sup> quarter 2015*
- *EIS (Environmental Impact Study) -- 2016-2017*
- *Feasibility Study -- 2017*
- *Mine Construction – begins 2018*
- *Mine Production – begins 2020*
- *Continue intense public education efforts*





**Doing it right  
from the  
beginning**

