



## Black Butte Copper

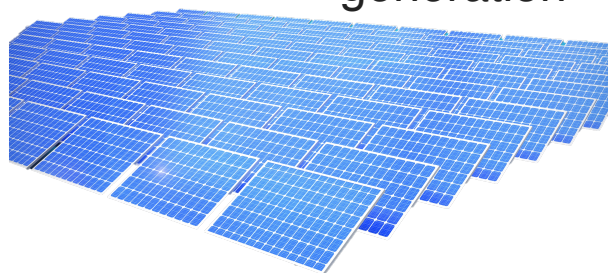
2020

# Black Butte Copper providing for our modern world



CFL and LED bulbs have a high **copper** content at 111,000 and 31,600 mg/kg

A photovoltaic solar power plant contains approximately 5.5 tons of **copper** per megawatt of power generation



Each megawatt of wind power capacity uses an average 3.6 tonnes of **copper**



Electric vehicles use between 3-4X the amount of **copper** as conventional vehicles

Subway cars, electric trains and buses each use about 2,300 pounds of **copper**



*Metals are part of the solution for saving our planet*



# Black Butte Copper- Community Involvement

*Involving our Community in the Process*



- ✓ Engaging local, regional and conservation communities at every juncture
- ✓ Supporting economic growth while protecting our natural resources
- ✓ Actively included in community activities, civic groups and support
- ✓ Committed to transparency
- ✓ Meagher County Stewardship Council gives stakeholders an independent voice with the goal of positive impact to our community.

*Building a show case mine that everyone will be proud of with a positive impact socially, economically and environmentally.*



# Black Butte- Modern Mining at its Best

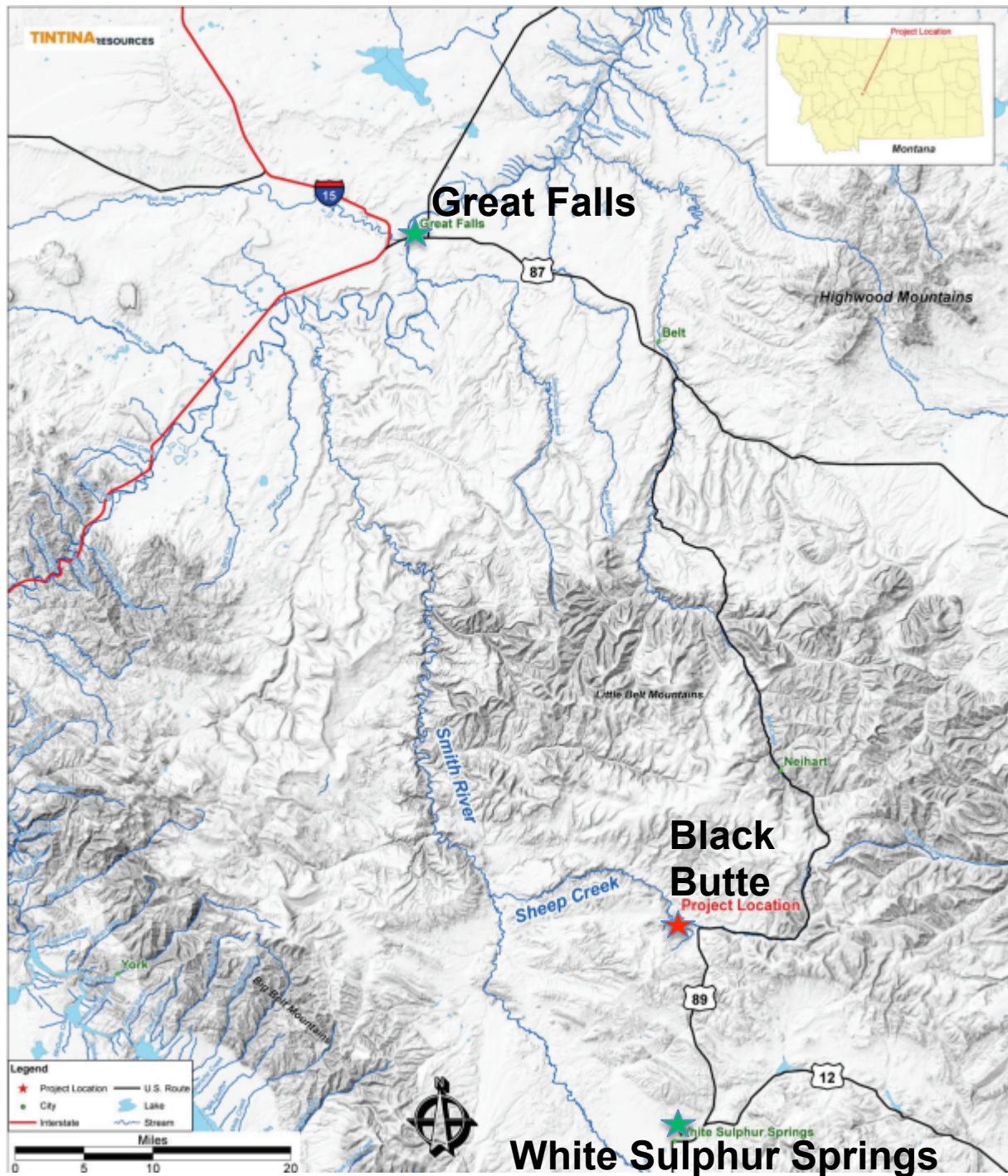
- ✓ Highly engineered underground mine
- ✓ Protects all water quality and quantity with no perpetual water treatment needed
- ✓ Fully bonded for all reclamation
- ✓ Returns land to agriculture use after reclamation
- ✓ Prevents legacy mining issues
- ✓ Provides 240 top paying jobs for 11 years
- ✓ Upgrades community infrastructure

AND HERE' S WHERE AND HOW.....

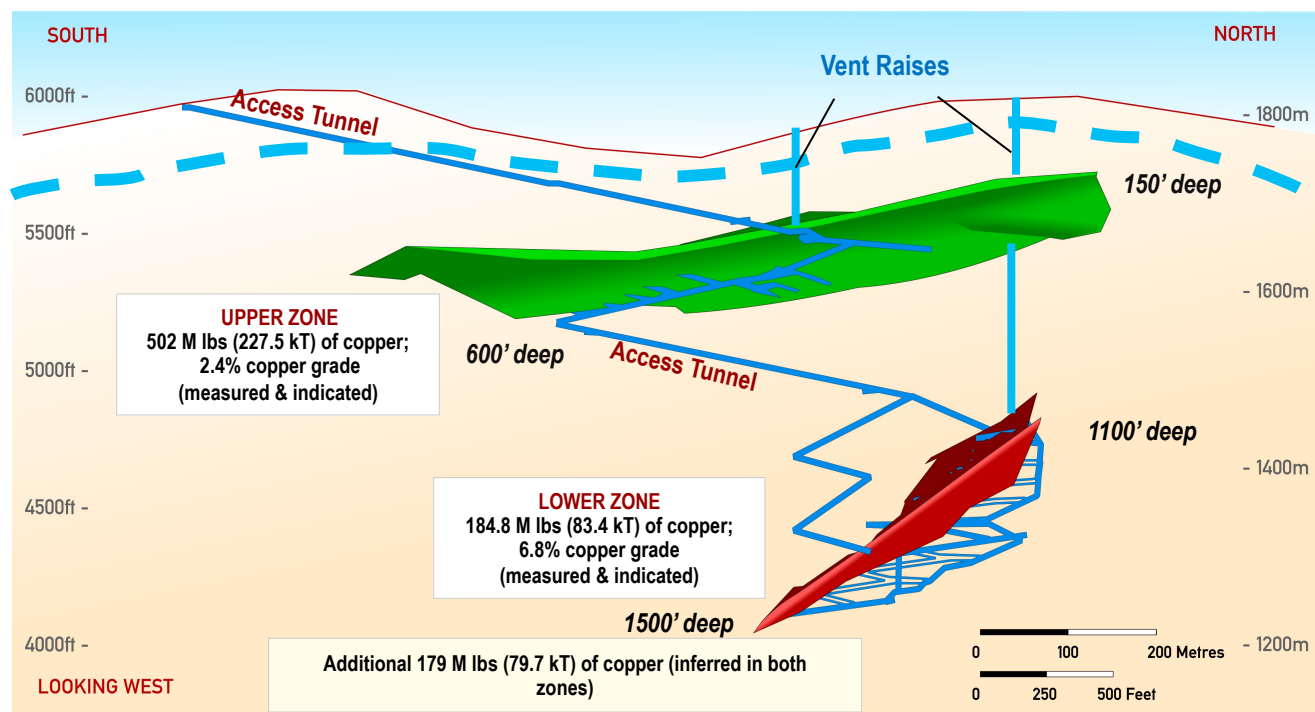


## Black Butte is:

- 17 miles north of White Sulphur Springs on Highway 89
- Facilities outside Sheep Creek valley, 19 stream miles from the Smith River
- On privately leased ranch lands. No impact on state or Federal lands.



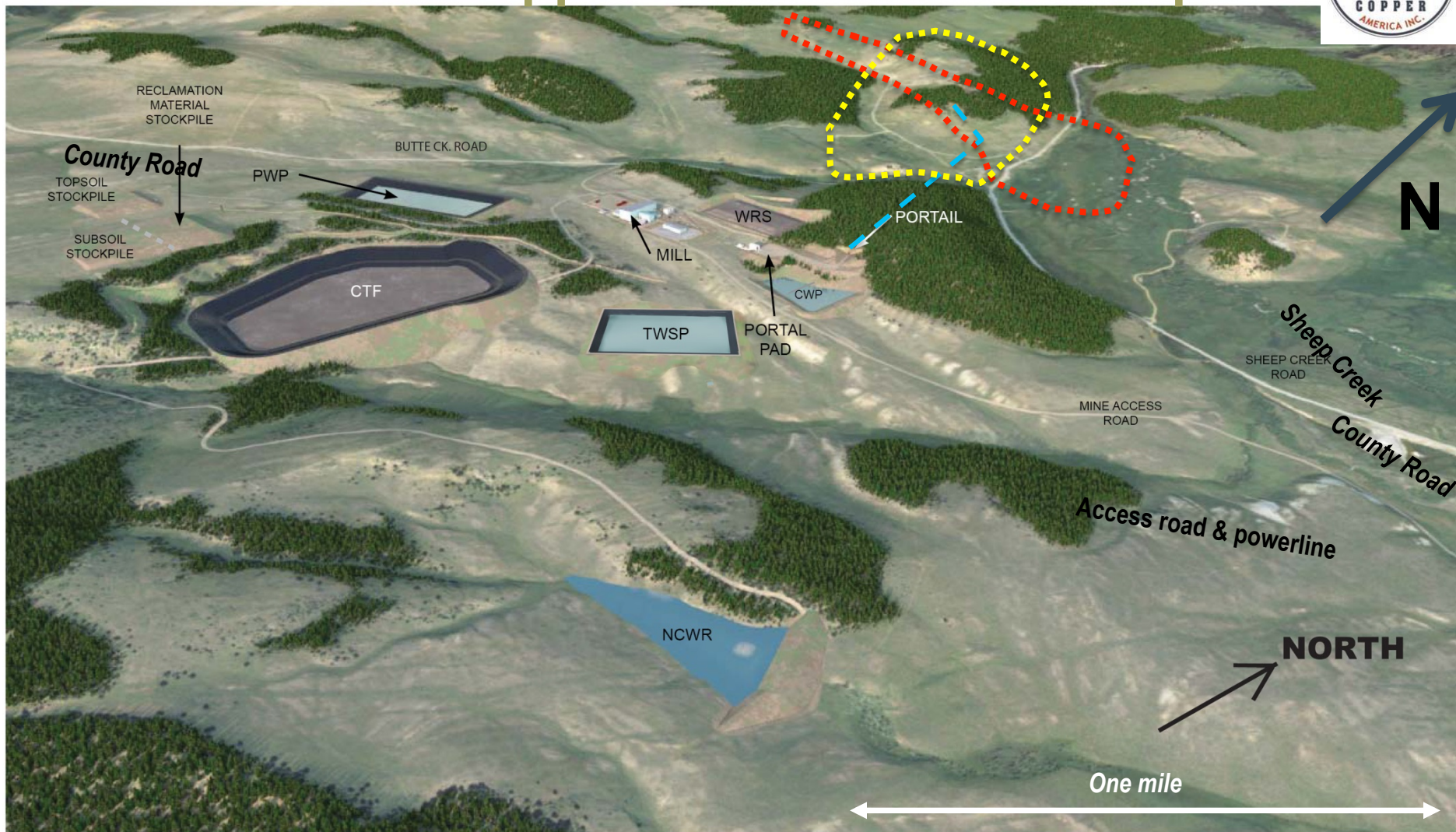
# Black Butte Copper – The Johnny Lee Deposit



*Black Butte Copper is one of the highest grade copper deposit  
being developed in the world.*



# Black Butte Copper– Small Surface Footprint



*Our very small surface footprint is out of Sheep Creek Valley and will be 100% reclaimed.*

# Black Butte Copper- all tailings will be cemented.



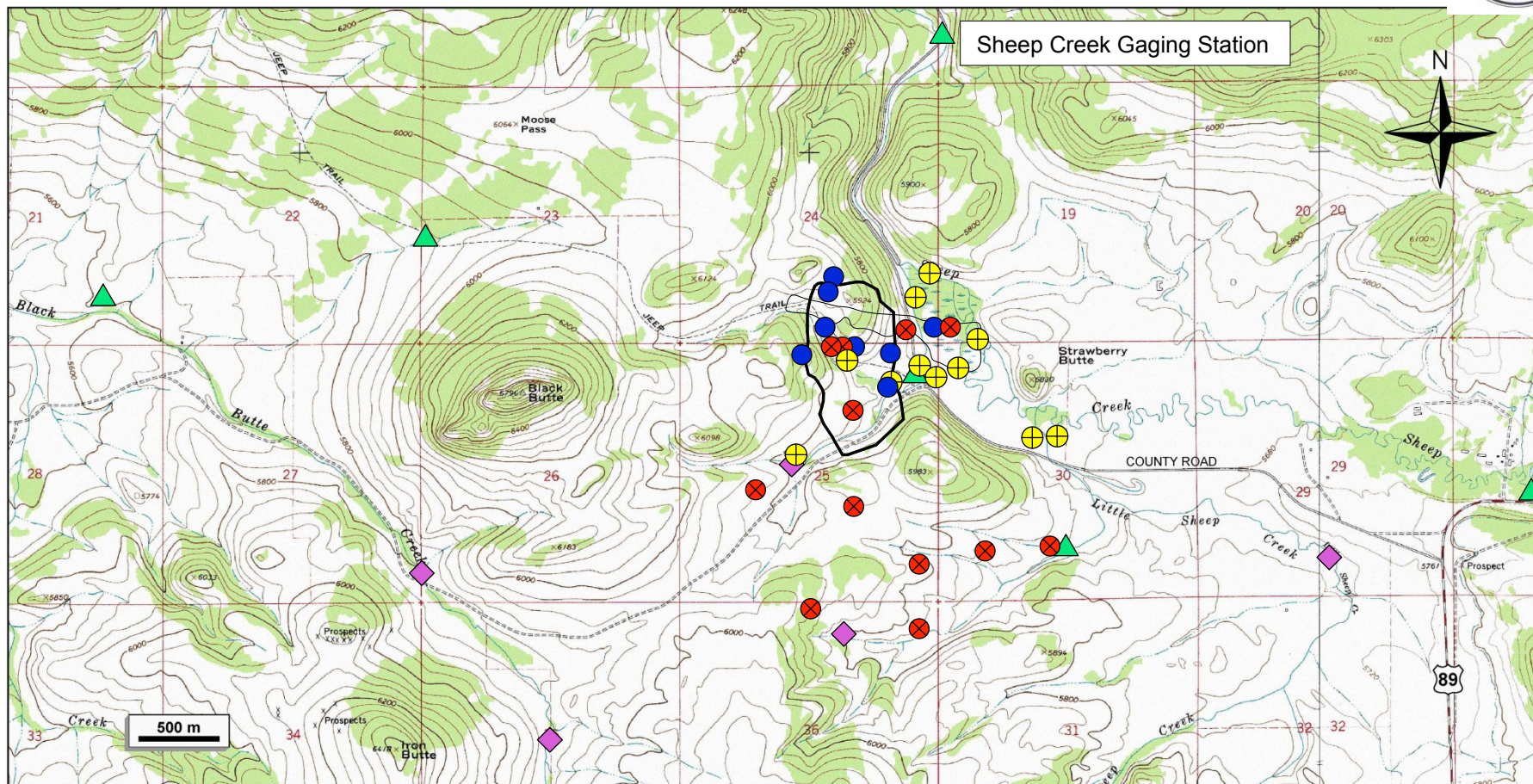
- ✓ Dry, hard, highly impermeable solid
- ✓ Approx. half will be returned underground as paste backfill and half will be stored as a non-flowable solid in a double lined surface facility
- ✓ The surface facility is designed for:
  - ✓ 10,000 yr. max. earthquake event
  - ✓ 1.5 times average annual precipitation in a single storm -- 22 inches rain on 11 inches of wet snow in one storm



In 2015, Montana passed tailings dam legislation, making our state the most stringent in the nation for tailings regulation. Black Butte exceeds these MT requirements and United Nations recommendations.



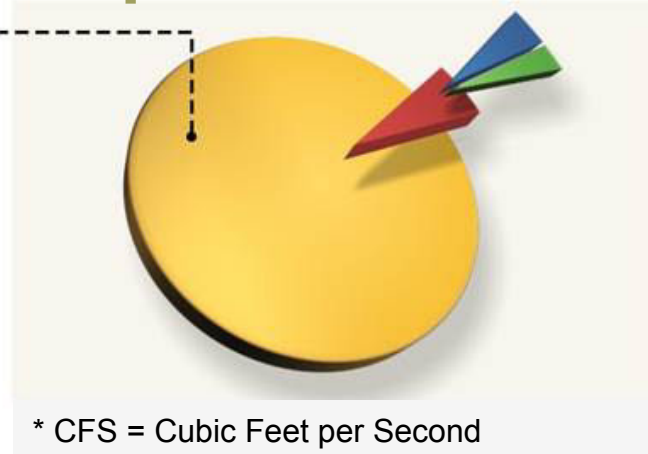
# Black Butte – Hydrology Sampling






- 27 Ground Water Monitoring Wells
- 10 Pump Test Wells
- 15 Piezometer Sites
- ◆ 14 Surface Water Sites
- ▲ 12 Spring Sites





Our 9 years of hydrological baseline data support a robust hydrologic model.

# Black Butte – Sheep Creek Flows



## Sheep Creek flow over a year:

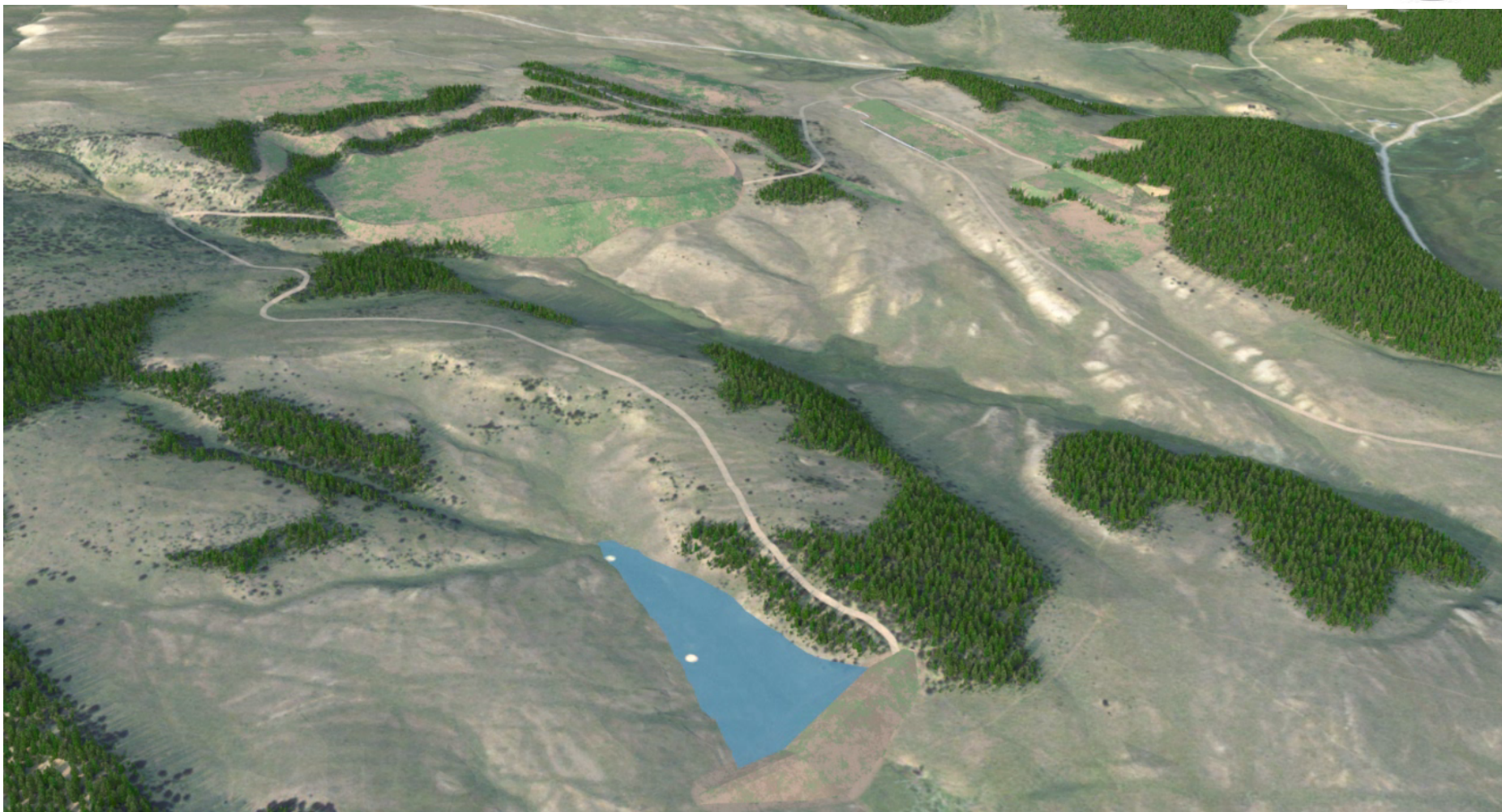
-  Maximum Flow - **825 CFS**
-  Average Flow - **56 CFS**
-  Dec-March Base Flow - **15 CFS**

-  Dec-March Base Flow - **15 CFS**
-  Maximum from Mine - **1.12 CFS**
-  Consumed during mining; mitigated with retired irrigation rights - **0.47 CFS = 210 GPM**
-  Treated by Reverse Osmosis and returned directly to ground water system – up to **0.65 CFS**

0.47 CFS is equivalent to a small sprinkler irrigation system. This groundwater amount used in the mining process is less than 3% of Sheep Creek's low flow during winter months and is completely mitigated by retiring the same amount of irrigation rights further up Sheep Creek.



# Black Butte Copper– 100% Reclamation



*Modern mining restores the site to original land uses and water flows, fully protecting our water and landscapes long term.*

## *Hard rock mining bonds in Montana*

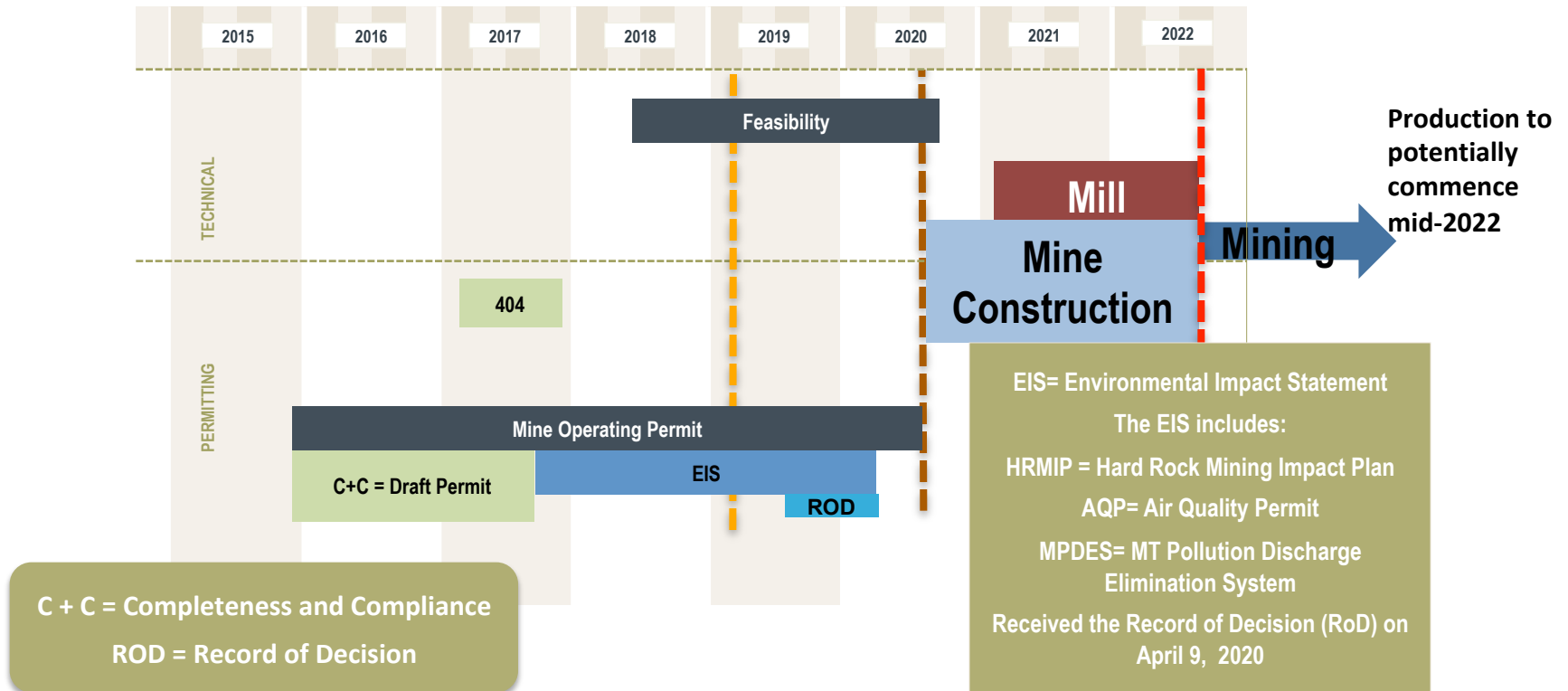
- ✓ Black Butte Copper will be required to post a reclamation bond with the State of Montana before construction commences.
- ✓ Bonding calculations include:
  - ✓ - Direct Reclamation Costs
  - ✓ - Indirect Reclamation Costs
  - ✓ - Mobilization
  - ✓ - Contingencies
  - ✓ - Engineering and Design Updates
  - ✓ - Third Party Contracting Cost
  - ✓ - Reclamation Management
- ✓ The bond remains in place until reclamation is complete and the MT Department of Environmental Quality releases the bond.



*In Montana, bonds are reviewed every year and recalculated every 5 years to protect our public and the environment from legacy mining issues.*

# Black Butte Copper Project Timeline

*Potential timeline towards permitting and production*

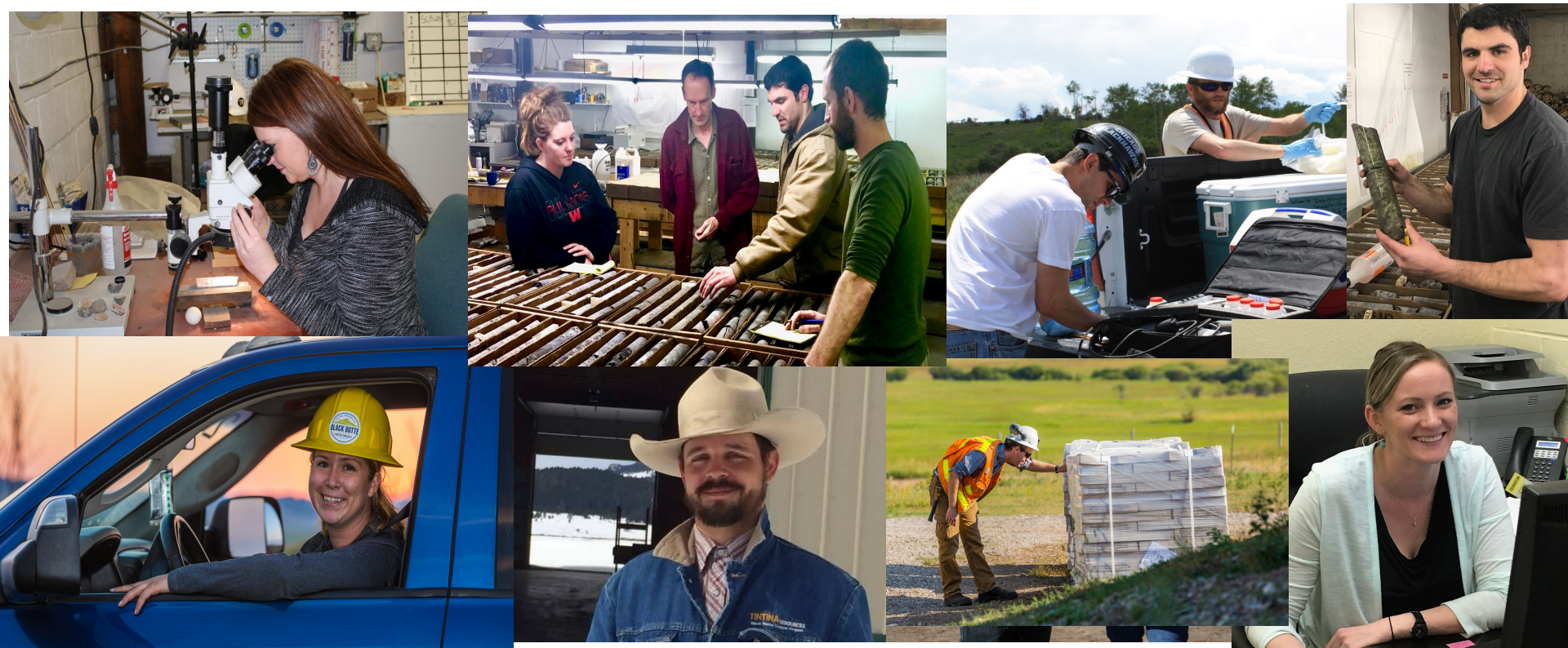




# Black Butte Copper – Jobs and the Economy



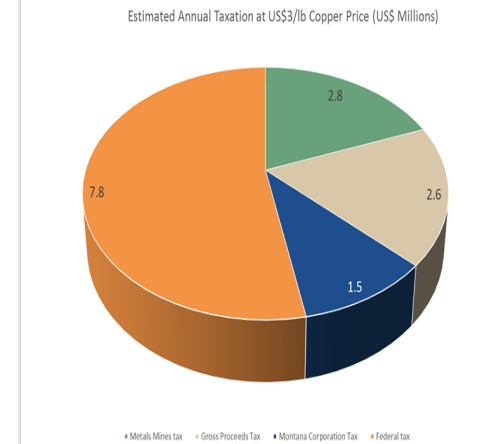
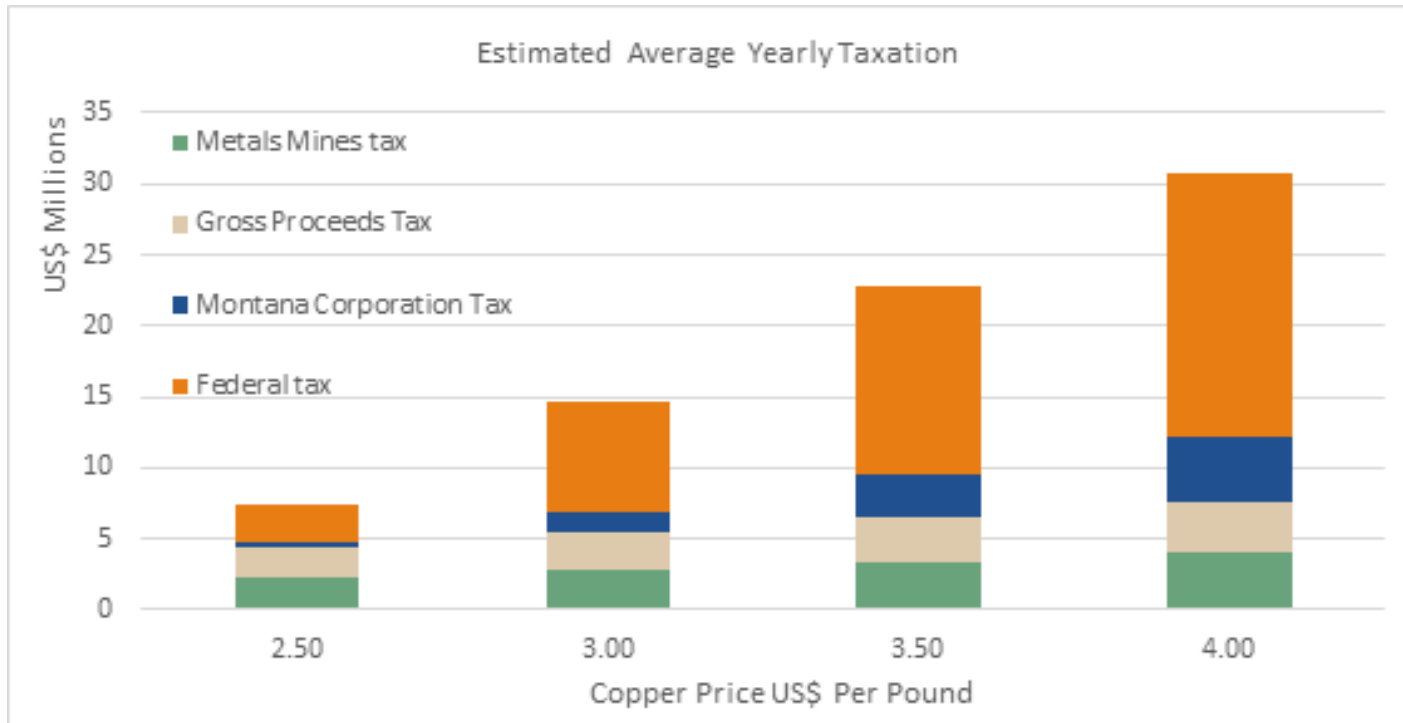
- ✓ Construction: 2 years, ~200-400 workers
- ✓ Mine Life: 11-14 years, ~240 employees, ~24 full time contractors
- ✓ Reclamation: 1-3 years, ~25 employees
- ✓ Current: 20 employees on payroll



Avg. Meagher County 2017 income per household = \$41,343

Avg. Tintina employee income per individual = \$65,000+

# Black Butte Copper Taxes



- ✓ **Montana's Hard Rock Mining Impact Act**
- ✓ Prepaid money from Tintina will go to the County in lieu of future taxes
  - ✓ Provides for community infrastructure improvements
  - ✓ Addresses increases in public school enrollment
  - ✓ Includes post mine transition preparation

*Making lives better for our families and friends*





**DONE RIGHT.  
DONE TOGETHER.  
THAT'S THE MONTANA WAY.**

---

**LEARN MORE AT  
[BLACKBUTTECOPPER.COM](http://BLACKBUTTECOPPER.COM)**