



NEW  
MEXICO  
COPPER  
CORPORATION

**WATER AND NATURAL RESOURCES COMMITTEE  
OCTOBER 2, 2018**

**Copper Flat Mine, Sierra County NM  
Jeffrey Smith, COO**



[themacresourcesgroup.com](http://themacresourcesgroup.com)

# THE COPPER FLAT MINE



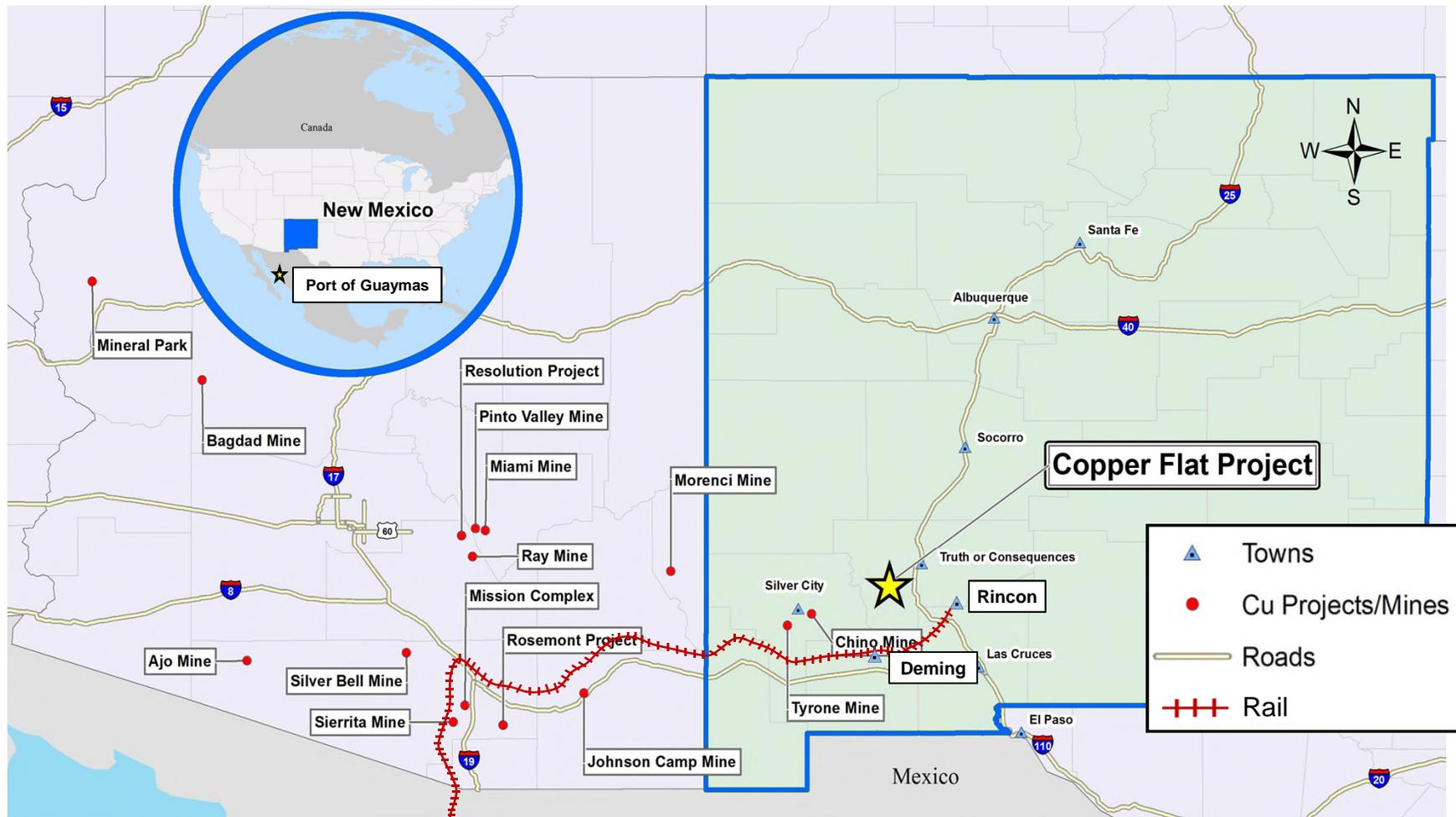
## PROJECT OVERVIEW

- Location: 20 Miles southwest of Truth or Consequences; 4 miles northeast of Hillsboro
- History: Mining on property dates to 1877; copper mining by Quintana Minerals (1980-83)
- Land Status: A mix of private lands owned by New Mexico Copper (40%-50% of total land package) and public lands administered by BLM (50%-60%)
- Reserves: 675 Million Pounds Copper; 20 Million Pounds Molybdenum; Gold and Silver
- Production Method: Open Pit with conventional flotation mill
- Duration: 2 years construction; 12 years production; 20+ years reclamation and closure; long term monitoring
- Positive Feasibility Study on Project
- Permitting: Started in 2012; State and Federal in progress (Baseline, Biological and Cultural Surveys; Federal EIS; ACOE 404; NMED Groundwater Discharge Permit; MMD Mine Permit; OSE Dam Safety)

# THE COPPER FLAT MINE



Located in one of the world's most prolific copper mining regions



# THE COPPER FLAT MINE



## **NEW MEXICO COPPER CORPORATION (NMCC)**

- Owner of Project Assets, Permittee, Developer, and Operator of Copper Flat Mine
- Organized as a New Mexico Domestic Profit Corporation in 2010
- Wholly-Owned Subsidiary of THEMAC Resources Group (Listed as TSXV:MAC)
- THEMAC Majority Shareholder (85%) is Tulla Group, an Australian Family (Maloney) Investment Group
- Tulla's Other Mining Investments Include Norseman Gold, Australia's longest continuously running gold mining operation producing over 5.5 million ounces of gold over 65 years in Western Australia.
- Tulla Is Fully Funding the Copper Flat Project and has invested \$55 Million in the Project to date.
- NMCC plans are designed to meet or exceed health, safety and environmental regulatory requirements.
- NMCC is committed to developing a long-term relationship with our neighbors in Sierra County and dedicated to providing the local community with significant opportunities for employment and economic development

# THE COPPER FLAT MINE



## SUMMARY OF COMMUNITY BENEFITS <sup>1</sup>

- Construction Jobs: 1,156 jobs total (direct, indirect, induced) in New Mexico
- Construction Economic Impact to State: Project adds \$55.6 Million to statewide labor income and adds \$79.6 Million to the value of materials and goods produced within the State
- Construction Expenditures: \$45 Million Sierra County; \$49 Million State
- Operation Phase Jobs: 270 full time direct jobs at mine with individual wages from \$35k to \$60k + Benefits; 368 – 407 jobs total (direct, indirect, induced)
- Federal and State Taxes: \$175 Million (Ad Valorem, Severance, Income, Gross Receipts)
- Ongoing jobs, wages and tax benefits will continue during the 20+ year reclamation and closure and long term monitoring phases

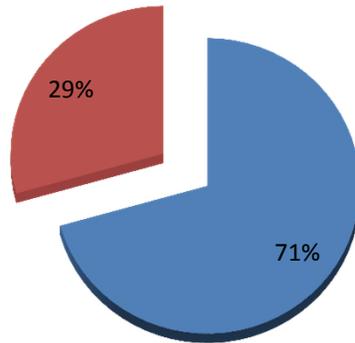
<sup>1</sup> Arrowhead Center, *The Socioeconomic Impacts of THEMAC Resources Group Ltd. Copper Flat Mine Project in Sierra County, New Mexico*, August 15, 2012

# THE COPPER FLAT MINE



## Project Investment More Than \$55 million To Date \$39 million (71%) Directed to New Mexico

\$55 Million Invested in Project



■ In State ■ Out of State

Sierra County	\$3.4 million
Albuquerque	12.6 million
Rest of State	22.8 million
<b>Total NM</b>	<b>\$38.8 million</b>

Sierra County	Salaries; Rent; Vehicle Maintenance & Fuel; Hotel and Restaurants; Banking Services; Contractors; Power Coop; Land Payments; Property Tax
Albuquerque	Salaries; Rent; Professional, Technical, and Business Services
Rest of State	Acquisition; Taxes; Agency Fees; Professional & Technical Services



## PREVENTING WATER POLLUTION

- Water management planning, engineering and design with sufficient capacity for anticipated storm events
- Site grading and constructing diversion structures to direct unaffected stormwater away from mine facilities and limit stormwater running onto mine facilities and capturing stormwater that falls directly on mine facilities for use at the mine
- Ore processing by flotation only; not employing ore leaching or solvent extraction processes
- Implementing and following a waste rock characterization and management program
- Constructing fully lined and contained process facilities including the flotation plant, tailings storage, process water piping systems, and process and affected water impoundments
- Tailings solution management, including facility drain down after processing ends, followed by placement of engineered cover and revegetation
- Reclamation of legacy disturbances during construction and operation; complete reclamation and closure of the site following operation, including reshaping and revegetation



## RECLAMATION AND CLOSURE PLAN

- Engineering for the reclamation and closure plan has been completed and plans submitted with the Mining Operation and Reclamation Plan, which also serves as the Closure Plan for the Discharge Permit. NMCC's DP application, including the Closure Plan, was deemed technically complete by NMED on February 1, 2018
- Growth media will be salvaged ahead of construction and stored for reuse at reclamation
- Mine rock stockpiles and the tailings facility will be covered with growth media and revegetated
- Shortly after mining ends, the open pit will be filled with fresh water to the equilibrium level of the hydraulic sink and partially revegetated to limit oxidation of the pit walls
- Water from the tailings facility will be removed through evaporation and the surface regraded, covered, and revegetated
- Buildings, pipelines, and other surface structures will be removed; concrete foundations will be broken and removed or buried as appropriate
- Pond and trench liners will be removed and the excavations backfilled and revegetated except as needed for ongoing water management

# THE COPPER FLAT MINE



## MINE WATER SUPPLY

- The mine water supply wells are located in the Lower Rio Grande Basin. The well field is located approximately 6 miles west of the upper end of Caballo Reservoir and 8 miles east of Copper Flat.
- NMCC has prepared water use calculations for the mine. Water requirements are driven primarily by the ore processing rate and the mine will need 6,100 acre feet per year for the planned operation.
- A groundwater model to evaluate pumping effects on surface and groundwater has been prepared by John Shomaker and Associates (JSAI). The JSAI model incorporates input from OSE hydrologists.
- NMCC currently owns 861 AF of adjudicated water rights and the Company is considering options to secure additional water rights needed for the mine.
- NMCC has committed to the BLM & OSE that it will provide all offsets to fully mitigate adverse affects on the Rio Grande, and committed to mitigate impacts to any nearby private wells that may be affected by our pumping.

# THE COPPER FLAT MINE



## PERMITTING STATUS

Permit/Approval	Granting Agency	Status
<b>Federal</b>		
Environmental Impact Study with Approval of Mine Plan of Operations	US Bureau of Land Management (BLM)	US Fish & Wildlife review in progress; BLM expects to issue Final EIS in 2018.
404 Permit	US Army Corps of Engineers	Re-designing footprints to limit encroachment on US waters; final application in Q4 2018.
<b>State</b>		
Mine Operating Permit	New Mexico Energy, Minerals and Natural Resources Department (NM EMNRD)- Mining & Minerals Division (MMD)	Permit application package Technically Approvable ; public hearings Q4 2018.
Groundwater Discharge Permit	New Mexico Environment Department - Groundwater Quality Bureau (NMED GWQB)	Draft permit issued Q1 2018; public hearings complete.
Permit to Operate (Air Quality)	New Mexico Environment Department - Air Quality Bureau (NMED AQB)	Permit received June 2013.
Secure Water Supply	New Mexico Office of the State Engineer (NMOSE)	Completed acquisition of 861 acre-feet of perfected water right in August 2018; this water is approved for mining use at Copper Flat. Additional sources identified and negotiations are in progress.
Archeologic and Historic Resources	New Mexico Department of Cultural Affairs - State Historic Preservation Office (SHPO)	Field surveys complete; Programmatic Agreement with agencies complete; draft recovery plan prepared.
New Dam Permit (TSF)	New Mexico Office of the State Engineer – Dam Safety Bureau	Application for new tailings dam started.



# THANK YOU

## FOR ADDITIONAL INFORMATION

**WEBSITE:** <http://themasourcesgroup.com>

**REPORTS:** [http://themasourcesgroup.com/copper\\_flat\\_mine/technical-reports](http://themasourcesgroup.com/copper_flat_mine/technical-reports)



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