

# THUNDER BAY NORTH PGM PROJECT, ONTARIO PDAC – March 9, 2011











#### **DISCLAIMER & COMPETENT PERSON'S STATEMENT**

#### Disclaimer

This presentation is provided to you for the sole purpose of providing preliminary background technical, financial and other information to enable you to review the business activities of Magma Metals Limited ("Magma"). The material provided to you does not constitute an invitation, solicitation, recommendation or an offer to purchase or subscribe for securities. The information in this presentation will be subject to completion, verification and amendment and should not be relied upon as a complete and accurate representation of any matters that a potential investor should consider in evaluating Magma. This presentation may contain "forward looking statements" which are made in good faith and are believed to have reasonable basis. However, such forward looking statements are subject to risks, uncertainties and other factors which could cause the actual results to differ materially from future results expressed, projected or implied by those statements.

#### Competent Person's Statement

The information in this presentation that relates to Exploration Results or Mineral Resources is based on information compiled, reviewed or prepared by Dr Keith Watkins and/or Mr Ralph Porter and/or Dr Bill Stone, the Executive Chairman, Executive Director Exploration - Australia and the Vice President Exploration - Canada of Magma Metals Limited, respectively, who are all Members of the Australasian Institute of Mining and Metallurgy, and each of whom is a "qualified person" as such term is defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects. Dr Watkins, Mr Porter and Dr Stone have sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration and to the activities undertaken, to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Dr Watkins, Mr Porter and Dr Stone consent to the inclusion in this presentation of the matters based on this information in the form and context in which they appear.



### **COMPANY HIGHLIGHTS**

- ASX & TSX listed precious & base metals explorer focused on Canada & Australia
- Thunder Bay North Platinum-Palladium-Copper-Nickel Project, Ontario:
  - > 0.7Moz Pt-equivalent in Indicated Resources
  - Positive Scoping Study
  - Multi-million ounce potential
  - Major exploration push in progress to increase size of project
- Griffins Find Gold Project, Western Australia:
  - Potentially large gold system
  - Exploration drilling in progress
- Experienced board & management
- Strong shareholder base



#### "MMW" MARKET FUNDAMENTALS

#### Capital Structure

Dual Listed: ASX & TSX: Code "MMW"

Shares Issued: 196m

Unlisted Options: 19m

Undiluted Market Cap. @ C\$0.35: ~C\$70m

Cash (end December quarter): C\$9m

#### **Shareholders**

Top 40 shareholders own ~85% of shares Major Shareholders:

	J	
>	Anglo Pacific Group	14%
>	Anglo American	11%
>	Panoramic Resources	9%
>	Geologic Resource Partners	7%
>	Directors	6%

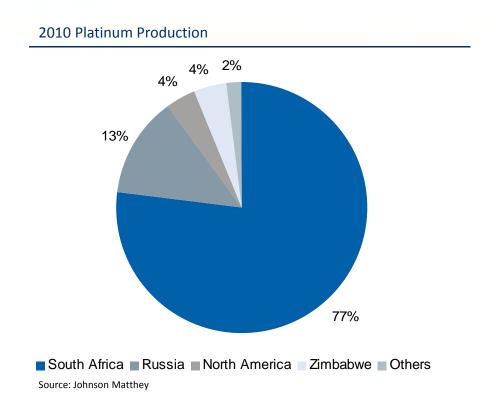


Note: A\$1 = C\$1



### THUNDER BAY NORTH WHY A NORTH AMERICAN PGM PLAY?

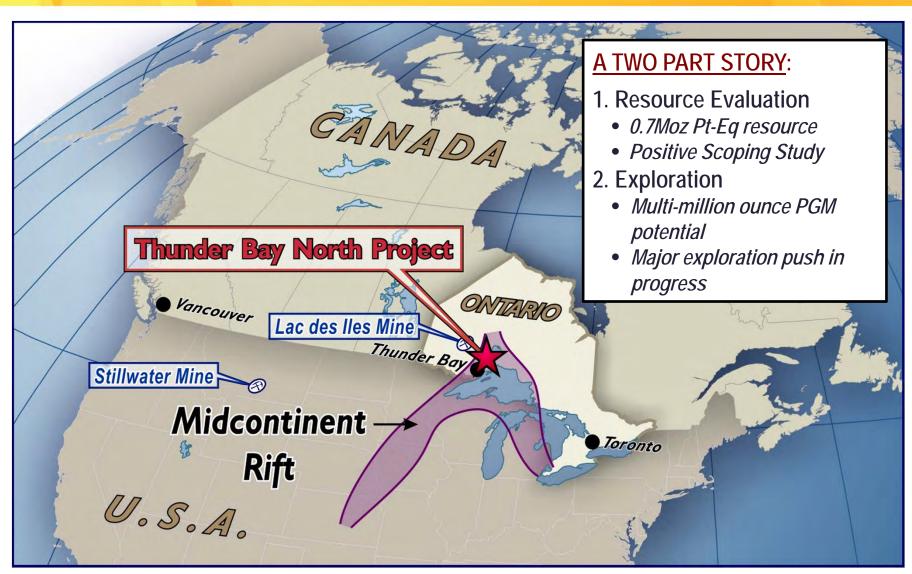
- South Africa produces 77% of the world's platinum (and 35% of the worlds palladium)
- Significant issues in the South African platinum industry:
  - Cost pressures from labour issues & increasing power costs
  - Strong Rand impacting profitability
  - High capex & opex of deep refrigerated underground mines
  - Power shortages



Thunder Bay North is located in a world class mining jurisdiction and does not face the issues impacting the South African platinum industry



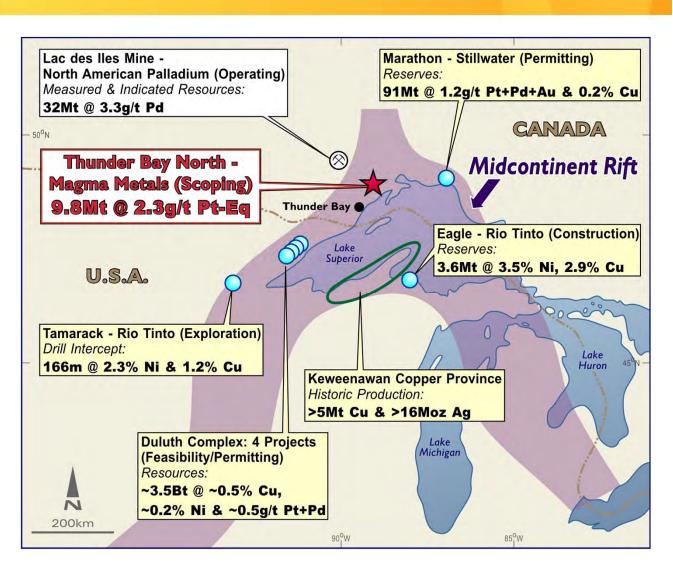
### THUNDER BAY NORTH PLATINUM – PALLADIUM – COPPER – NICKEL PROJECT





### THE MIDCONTINENT RIFT: AN EMERGING NORTH AMERICAN NI-CU-PGM CAMP

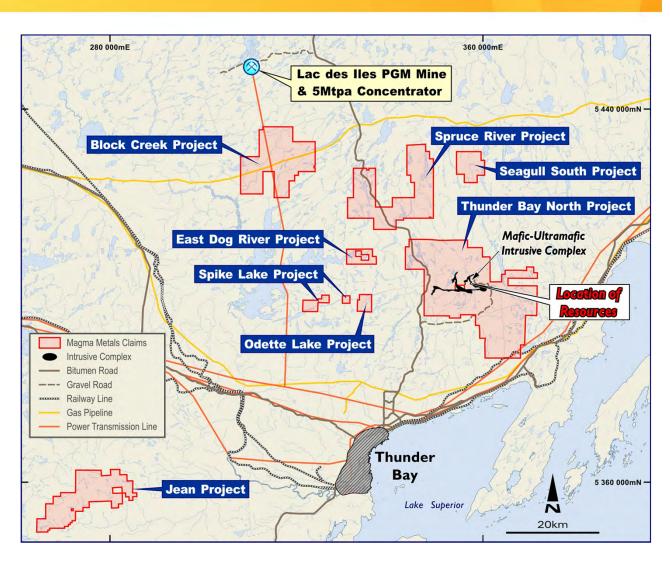
- Emerging Ni-Cu-PGM province – potential new North American mining camp
- New exploration model: ultramafic magma conduits (Eagle, Tamarack, Thunder Bay North)
- Geology analogous to giant Noril'sk camp in Russia
- Excellent potential for further discoveries





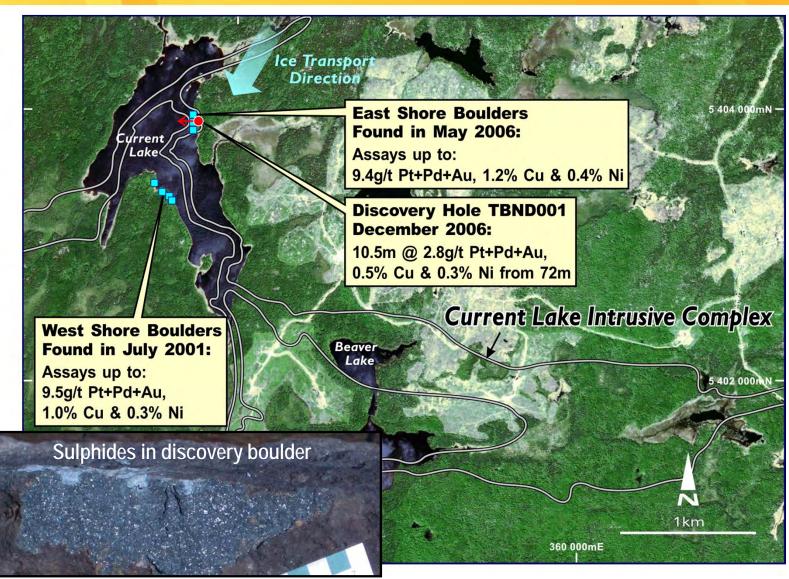
### THUNDER BAY PROJECTS

- Mineral Resources 45km from Thunder Bay
- Excellent infrastructure
- 1,000km² of claims abundant exploration targets
- Rio Tinto active in Thunder Bay North area



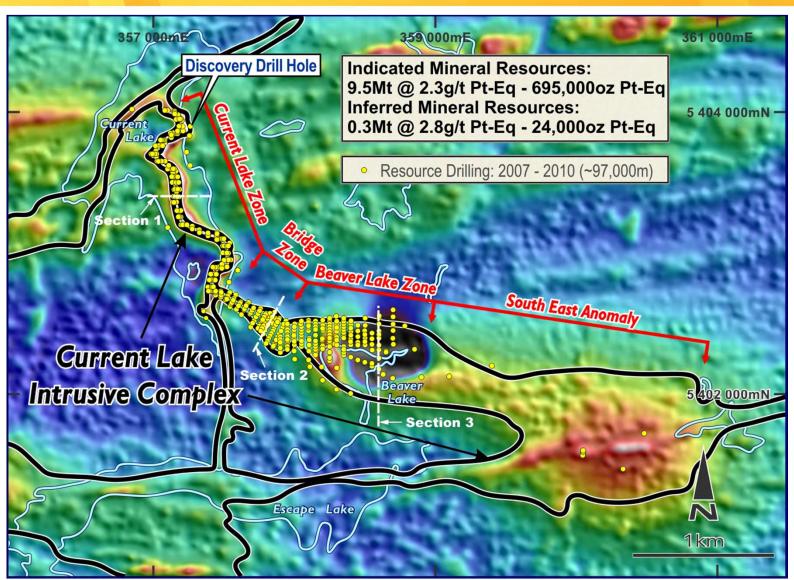


## THUNDER BAY NORTH GREENFIELDS DISCOVERY





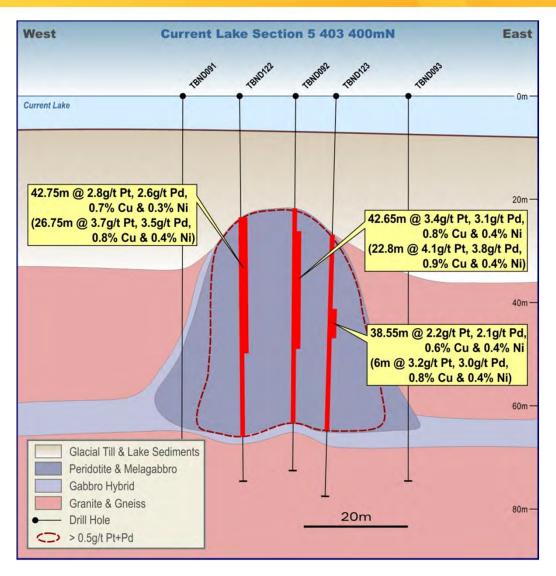
#### RESOURCE DRILLING





## CROSS-SECTION 1

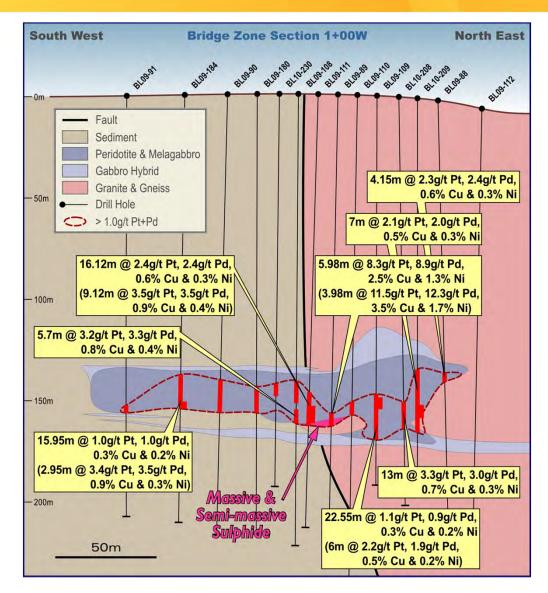
- Mafic-ultramafic magma conduit intrudes granite
- Tube-like shape: ~40m x 40m
- Nearly all mineralized
- Mineralization within 70m of surface





## BRIDGE ZONE: CROSS-SECTION 2

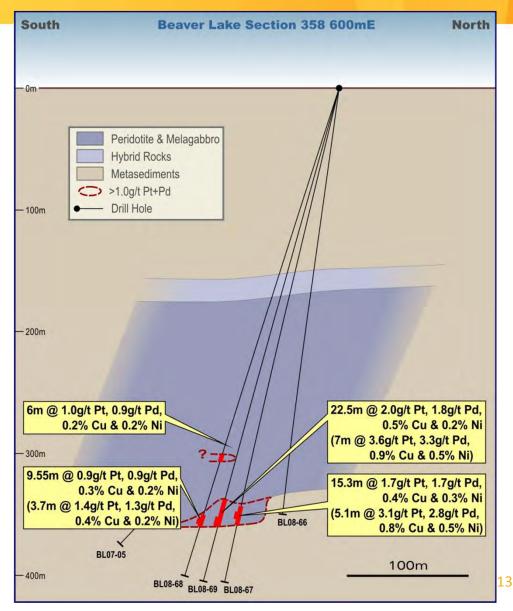
- Mafic-ultramafic magma conduit intrudes granite and meta-sediment
- Slab-like shape:
  - ~200m wide x 30-40m thick
- Lower half is mineralized
- Mineralization is about 150m deep
- High-grade massive sulphide zones in basal depressions





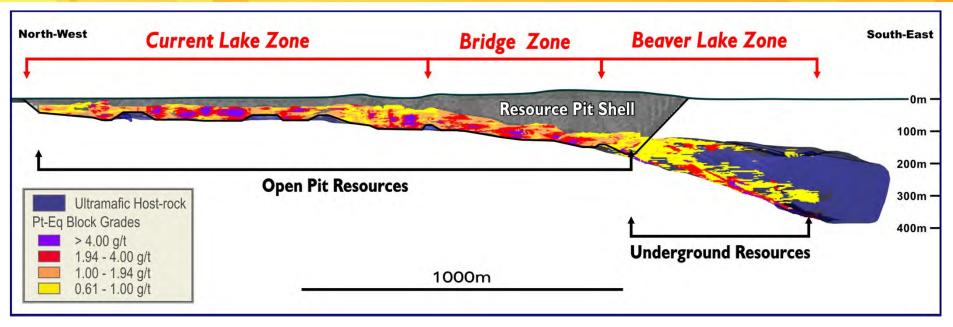
## BEAVER LAKE ZONE: CROSS-SECTION 3

- Mafic-ultramafic magma conduit intrudes meta-sediment
- Slab-like shape:
  - ~500m wide x 150-200m thick
- Mineralization in depressions in the floor of the intrusion
- Mineralization is up to 350m deep
- More than one mineralized zone on some sections





#### AMEC RESOURCE ESTIMATES



Open Pit:

Indicated Resource: 8.46Mt @ 2.1g/t Pt-Eq for 580,000oz Pt-Eq (1.0g/t Pt, 1.0g/t Pd, 0.3% Cu & 0.2% Ni)

Inferred Resource: 0.05Mt @ 2.0g/t Pt-Eq for 3,000oz Pt-Eq (1.0g/t Pt, 0.9g/t Pd, 0.2% Cu & 0.2% Ni)

<u>Underground</u>:

Indicated Resource: 1.03Mt @ 3.5g/t Pt-Eq for 115,000oz Pt-Eq (1.6g/t Pt, 1.5g/t Pd, 0.4% Cu & 0.2% Ni)

Inferred Resource: 0.21Mt @ 3.0g/t Pt-Eg for 20,000oz Pt-Eg (1.4g/t pt, 1.3g/t Pd, 0.3% Cu & 0.2% Ni)

Total:

Indicated Resources: 9.49Mt @ 2.3g/t Pt-Eq for 695,000oz Pt-Eq (1.1g/t Pt, 1.0g/t Pd, 0.3% Cu & 0.2% Ni)

Inferred Resources: 0.27Mt @ 2.8g/t Pt-Eq for 23,000oz Pt-Eq (1.3g/t pt, 1.2g/t Pd, 0.3% Cu & 0.2% Ni)



#### **AMEC SCOPING STUDY**

#### Mining & processing based on open pit resource\*:

- 10Mt @ 1.9g/t Pt-Eq open pit
- 1.5Mt per annum 7 year mine-life
- 65,000oz per annum of Pt-Eq metal
- 74% overall recovery (Pt-Eq)
- Total Capex C\$207m & Total Opex C\$42/t

#### **Economics:** Base Case to Upside Case ranges\*:

Cashflow: C\$164 to C\$360m

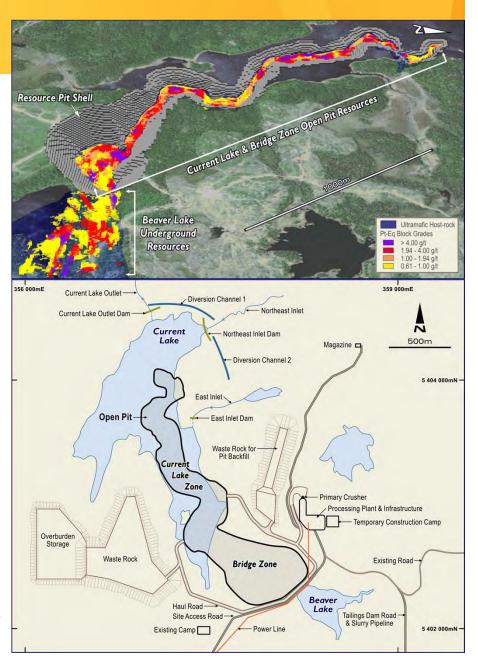
• IRR: 13% to 27%

NPV: C\$41m to C\$222m

#### Outcomes:

- Important mining, processing, marketing and environmental/permitting knowledge gained
- Additional resources will considerably enhance project economics
- Potential to significantly reduce capex & opex

(\*See Magma announcement of February 7, 2011 for details on the Scoping Study, including Base Case and Upside Case parameters and the calculation of platinum equivalents)





#### PROJECT STRATEGY

### Two part strategy for Thunder Bay North going forward:

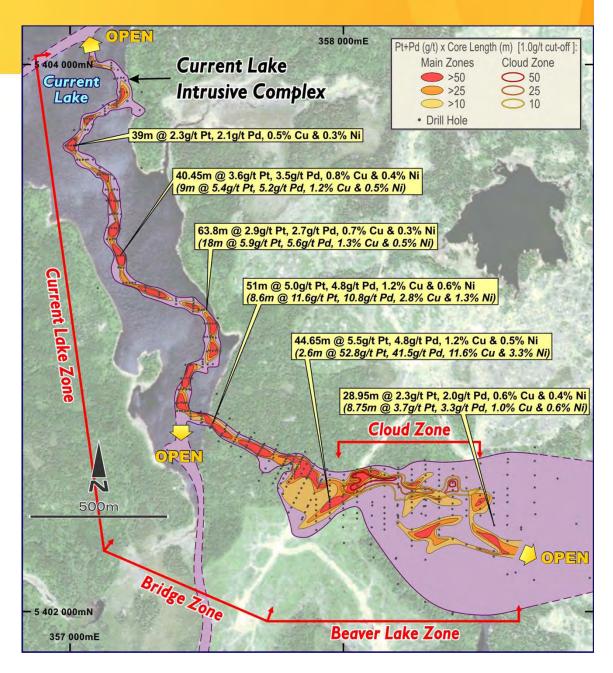
- 1. Focus on exploration to grow resources
  - Resource extension targets
  - Massive sulphide targets
  - Regional exploration for additional resources
- 2. Optimize scoping study outcomes
  - Mineral processing
  - Open pit & underground mining
  - Reduce capex & opex





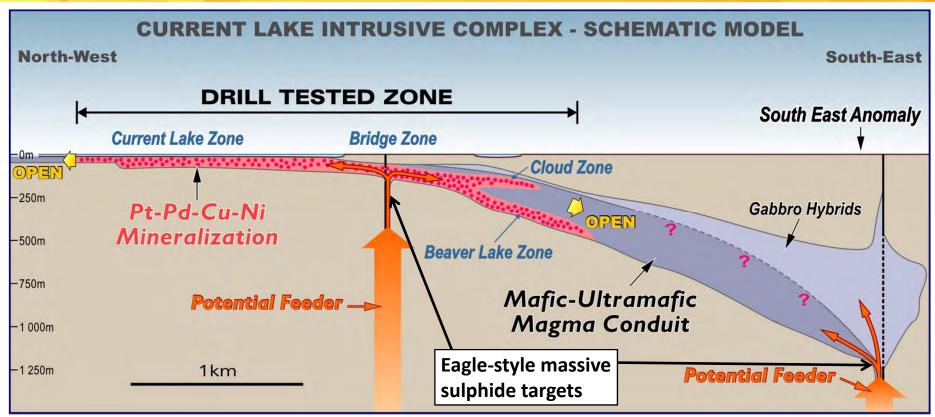
- Mineralization extends for 3.4km along strike
- Mineralization is open to north, south & east of the defined resources
- Potential for additional high grade resources in feeder structures below the conduit
- Step-out drilling planned in 2011 to extend resources

### RESOURCE EXTENSION TARGETS





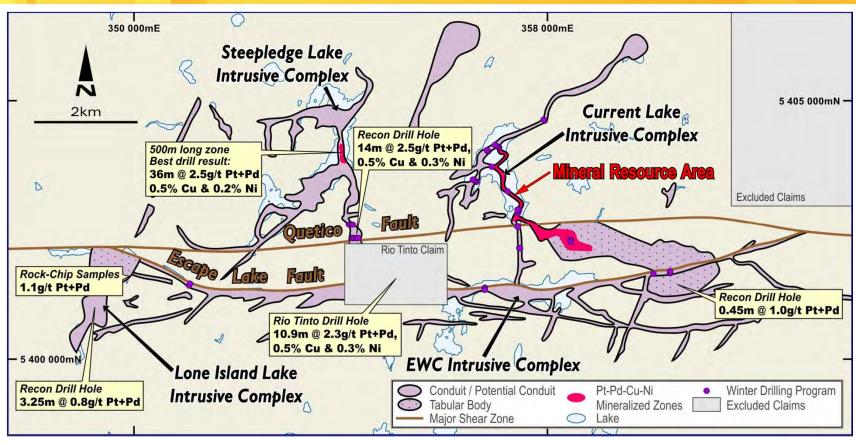
#### **EXPLORATION MODEL**



- Pt-Pd-Cu-Ni mineralization in magma conduit structures
- Feeder zones to conduits could contain high-grade massive sulphide mineralization
- Exploration programs are targeting both styles of mineralization



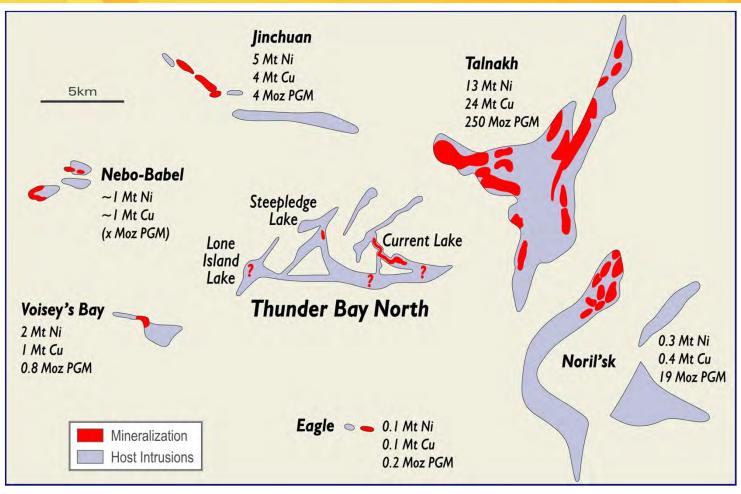
### REGIONAL EXPLORATION EXCELLENT POTENTIAL FOR FURTHER DISCOVERIES



- 80km² magma conduit complex exploration is at a relatively early stage
- Potential for multi-million ounce PGM system major exploration push in progress
- 11,000m winter drilling program in progress with 3 drill rigs
- 40,000m of exploration diamond drilling planned in 2011



### MAGMA CONDUITS HOST WORLD CLASS NI-CU-PGM DEPOSITS



- Footprints of magma conduits hosting world class Ni-Cu-PGM deposits
- Thunder Bay North of comparable size but exploration is at a relatively early stage



#### HIGHLIGHTS SUMMARY

#### Magma Metals Limited:

- ASX & TSX listed: Code "MMW"
- Precious & Base Metals focus in Canada & Australia

#### Thunder Bay North PGM Project, Ontario:

- Close to excellent infrastructure in a pro-mining jurisdiction
- Current Resource: 0.7Moz Pt-Equivalent
- Positive Scoping Study
- Multi-million ounce PGM potential
- 40,000m exploration drilling program in progress to grow the project



### MAGMA METALS LIMITED (ASX & TSX: MMW)

### www.magmametals.com.au

Offices:

PERTH: Level 3, 18 Richardson Street, West Perth, WA 6005

TORONTO: Suite 2700, 161 Bay Street, Toronto, ON M5J 2S1

THUNDER BAY: 1004 Alloy Drive, Thunder Bay, ON P7B 6A5

#### **Contacts:**

Keith Watkins, Executive Chairman & CEO Greg Taylor, Investor Relations

Tel: +61-(0)8-9324-1500 (Perth) Tel: +1-905-337-7673 (Toronto)

E-mail: <u>keith.watkins@magmametals.com.au</u> Mob: +1-416-605-5120

E-mail: gtaylor@magmametals.ca