



AMBLER METALS UPDATE

ALLIANCE FAIRBANKS CHAPTER

Ramzi R Fawaz
President & CEO

MARCH 2, 2022

- Ambler Metals LLC (AMC) formally established February 11, 2020
- 50%-50% JV between South32 and Trilogy Metals
- Alaskan Company with offices in Anchorage and Fairbanks
- Partnership with NANA Regional Corporation for the exploration and development of the Upper Kobuk Mineral Projects (UKMP)
- Co-funding the Feasibility and Permitting Stage of the Ambler Access Project with AIDEA
- Progressing the Arctic Project through its Pre-Feasibility Stage and ready to submit a 404 permit application
- AMC Board approved a 2022 Budget of \$28.5M

2022 Field Season

Plan, execute and close out a safe and effective 2022 summer site program

Arctic - Complete ~2,300m of infill and geotech drilling

Regional – Complete ~5,500m of exploration drilling

Bornite – Complete ~2,200m of exploration drilling

Studies & Permitting

Complete prep work leading to a 404 permit NOI submission and start the EIS process

Progress prefeasibility study through stage gate approval

Ambler Access Project

Support Ambler Access Project through its 2022 Feasibility and Permitting stage

Continued intervention on the two lawsuits

Environmental Social & Governance

In partnership with NANA, engage with communities and stakeholders to ensure regional interests are respected and protected

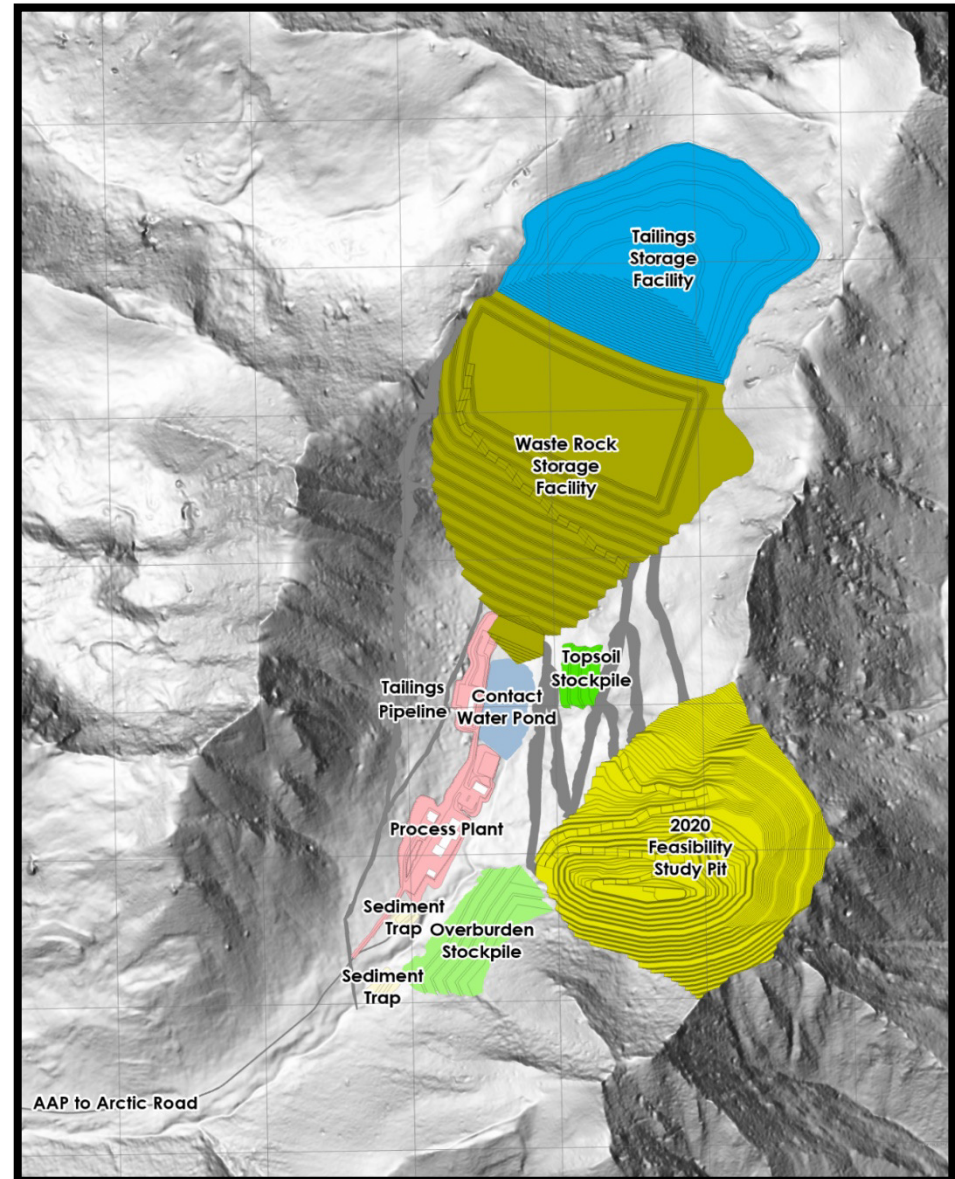
Put in place an effective organization, underpinned by strong financial systems and internal controls

THE ARCTIC PROJECT



Proposed Major Facilities

- Open Pit
- Tailings Storage Facility
- Waste Rock Storage Facility
- Contact Water Pond
- Overburden & Topsoil Stockpiles
- Process Plant



PERMITTING PROCESS

- State, Federal, and Borough permitting processes
- Decision making process – public input is very important

US ARMY CORP OF ENGINEERS

- Lead Agency for the NEPA 404 EIS Process

STATE & OTHER

- NWAB, ADEC, ADNR, and ADF&G

**Employed ~120 seasonal people
w/t ≥ 50% Shareholders**

AMBLER METALS DIRECT HIRE

- 43 seasonal direct hires during this year, 31 (72%) were NANA Shareholders
 - 19 from Upper Kobuk villages
 - 2 from Lower Kobuk Villages
 - 4 Other Northwest Arctic Borough
 - 3 Interior Alaska
 - 3 Southcentral Alaska

CONTRACTOR HIRING

- 31 NANA Shareholders worked for contractors – 42% of contractor workforce



EXPLORATION PRELIMINARY PLAN

- **Arctic**
 - 3 mine geotechnical holes ~500m
 - 6 resource infill holes ~1400m
 - 2 tailings/waste rock foundation geotechnical holes ~400m
- **Regional**
 - ~17 holes – 5,500 m at Cliff, DH, Center of the Universe, Sunshine, Pipe, and others in the Ambler VMS Belt
- **Bornite**
 - ~6 holes ~2200m in the Cosmos Hills (Lowlands, West Bornite/North Pardner Hill)



DIRECT HIRE POSITIONS

- Core Cutters
- Geotechnicians
- Soil Samplers
- Geologists
- Environmental Technicians
- Assistant Camp Managers
- Mechanics – Requires Drivers License
- Drivers – Requires Drivers License
- Housekeepers
- Administrative Assistants

CONTRACTOR POSITIONS

- Drillers
- Drill Helpers
- Pad Builders
- Kitchen Staff

Jobs will be listed on the Ambler Metals website under “careers” (www.amblermetals.com)



SCHOLARSHIP PROGRAM

- Ambler Metals-NANA Scholarship
 - \$40,000 per year
 - Available for NANA shareholders

TECHNICAL SKILLS DEVELOPMENT

- Driver's License course at ATC
- Operator training at MAPTS

WORKFORCE DEVELOPMENT SUPPORT

- Arctic Technical Center
- GeoForce
- Alaska Resource Education



- Engagements with communities in NANA & Doyon regions

- Ambler
- Kobuk
- Shungnak
- Noorvik
- Noatak
- Kotzebue
- Kiana
- Hughes

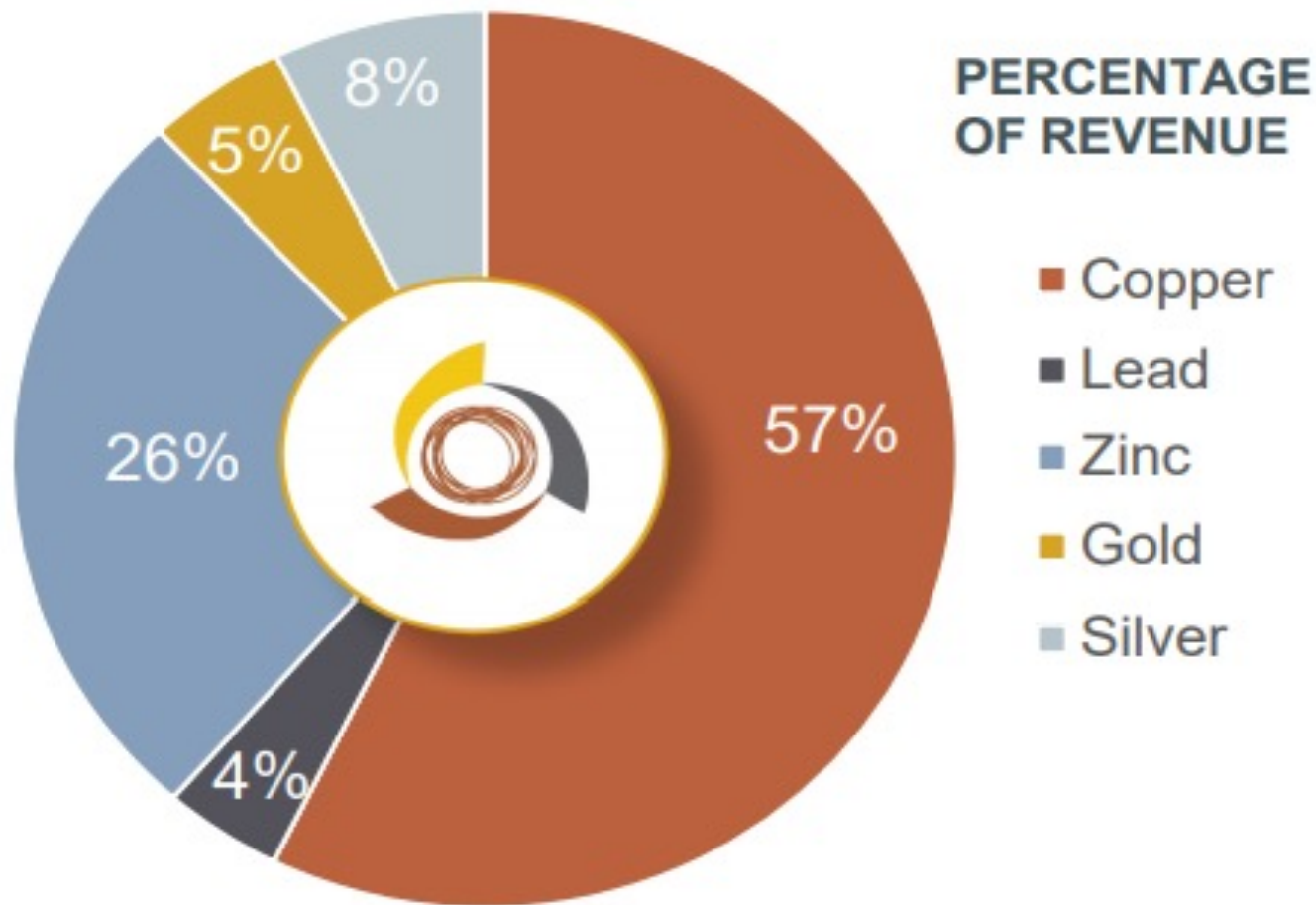


Kobuk – September 2021

- Focusing on job opportunities, the Arctic Project and permitting plans



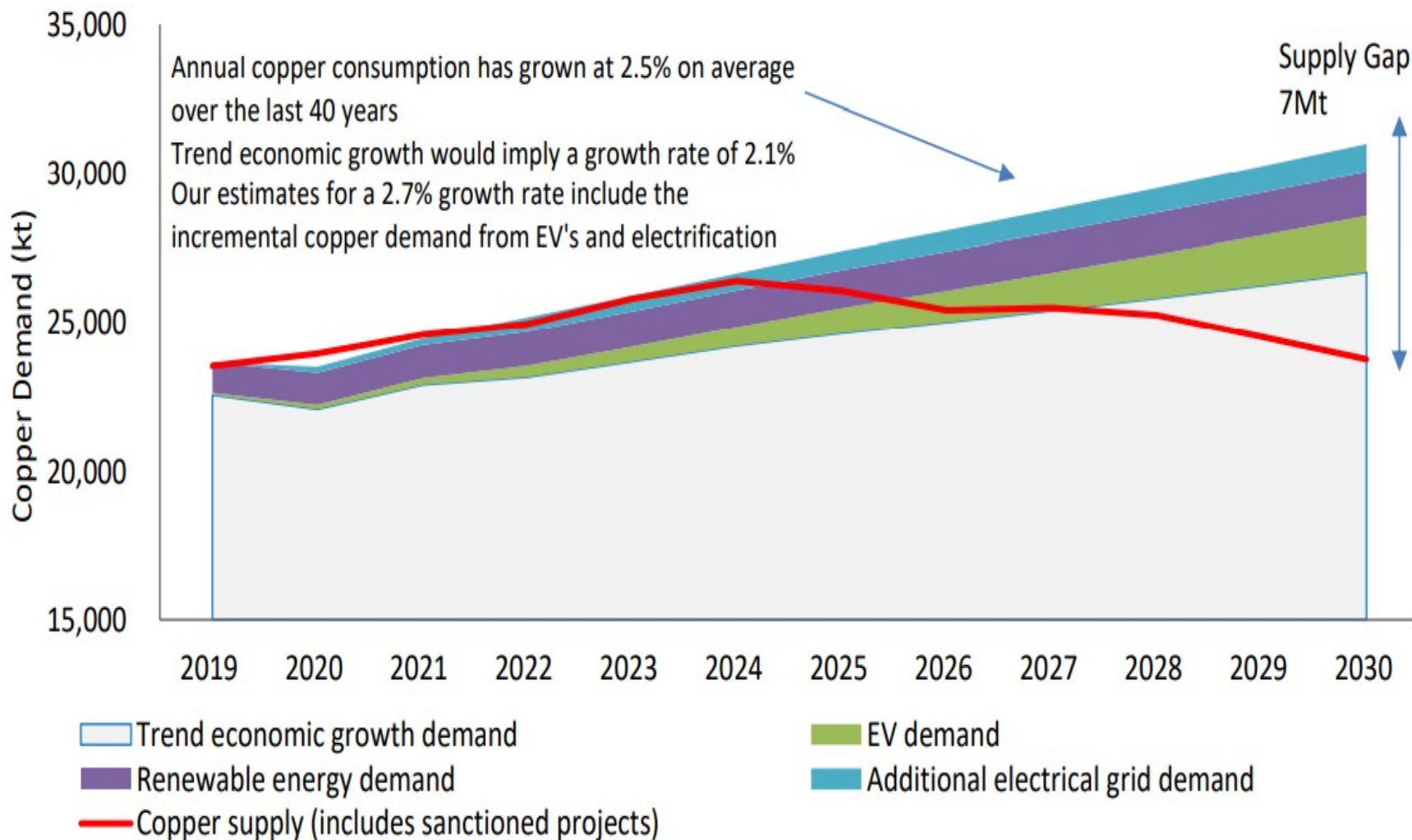
Noorvik – August 2021



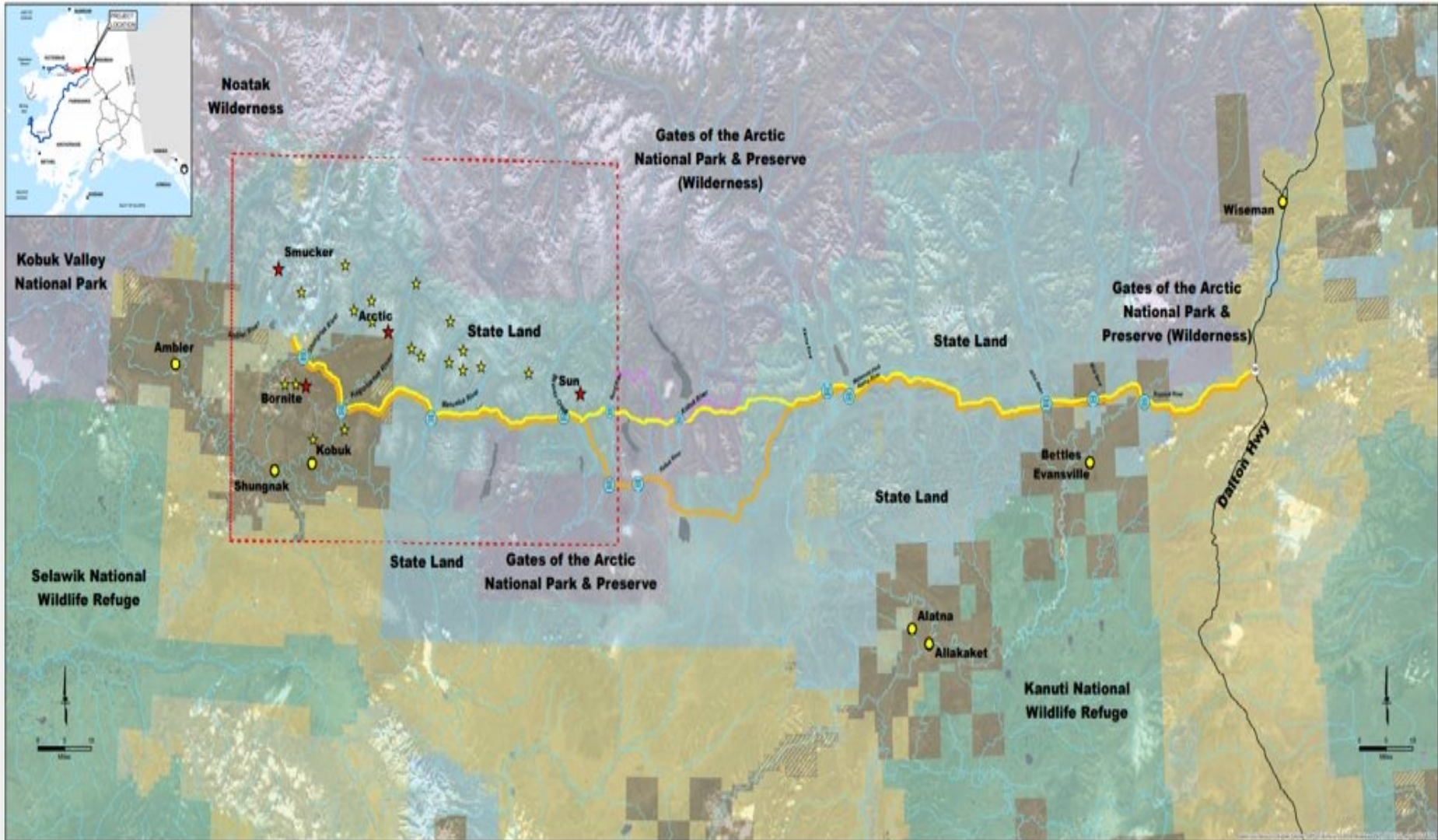
Forecast Annual Metal Production

- 155M lbs Cu
- 192M lbs Zn
- 32M lbs Pb
- 3.4M oz Ag
- 32k oz Au

COPPER SUPPLY VS DEMAND



AMBLER ACCESS PROJECT



AMBLER MINING DISTRICT INDUSTRIAL ACCESS PROJECT

- | | | | | | | |
|------------------------|---|--------------------|-----------------------|--|---------------------------------|----------------|
| Ambler Mining District | AMDIAP Preferred Corridor (211 Miles) | Existing Roads | Proposed Large Bridge | Bureau of Land Management (Federal Land) | ANCSA (Native Corporation Land) | State Land |
| Major Mineral Deposit | AMDIAP Alternative Corridor (228 Miles) | Milepost 161 | Cities | Fish and Wildlife Service (Federal Land) | ANCSA Selected | State Selected |
| Mineral Resources | | Rivers and Streams | Wilderness Boundary | National Park Service (Federal Land) | | |

Source: Alaska Mining District - History and Geology of the Ambler Project, Ambler District, Alaska Central, Alaska West, Alaska University Park, 1988. Mineral Resources, State of Alaska Report, January, U.S. and Alaska, M. R. 2008, Report of Minerals, Western Alaska Access Planning Study, Working Paper, 2007, 2008, 2009.

- Joint Record of Decision Issued by the BLM and Army Corp of Engineers 23 July, 2020
- Army Corp of Engineers issued the 404B permit 25 August, 2020
- NPS and BLM RoWs Approved January 5, 2021
- Executed Land Access Agreement with Doyon April 14, 2021 & with NANA September 14, 2021
- Ambler Access Development Agreement, between AIDEA & Ambler Metals, approved February 11, 2021
- AIDEA and AMC Boards approved a \$30M budget for AAP's 2022 Annual Plan
- AAP Subsistence Advisory Committee formally established December 2021 & held first meeting on January 11, 2022
- Litigation against AAP's FEIS/JROD is ongoing; NANA/State/AIDEA/AMC are Intervenor Defendants
- DOJ requested 60 day stay in October 2021 that expired end November, and the litigation process resumed
- January 21, 2022 DOJ requested another 30-day stay that expired on Feb 22nd
- On Feb 22 the Interior Department requested the court to remand the ROD in order to correct "deficiencies" identified in the NEPA analysis - ref NHPA section 106 and ANILCA section 810

UPCOMING ACTIVITIES



Cultural Resources

Continue field surveys in prioritized areas.



Geotechnical Investigations

Characterize subsurface conditions of the riverine environment, general soil characteristics along alignment, and assess viability of material sites. Borings at 45 river crossings, 11 material sites and 10 roadway sites along alignment. Summer and winter activities planned.



H+H Investigations

Assess conditions for area drainage, culvert placement, and bridge design; spring breakup monitoring at 26 rivers; establish stream gauges at bridge sites.



Land Survey Activities

Establish land ownership boundaries, bodies of water, and major design features; survey Northwest Arctic Borough boundary; survey alignment over 4 months for land ownership and project features.



Roadway Design

Establish project design criteria, advance preliminary engineering to 35% design.



Fish Habitat Studies

ADF&G will continue 2021 field efforts to collect fish habitat, water quality, species presence, or critical spawning area data, focusing on mid-alignment (MP 58-130) at 57 locations.



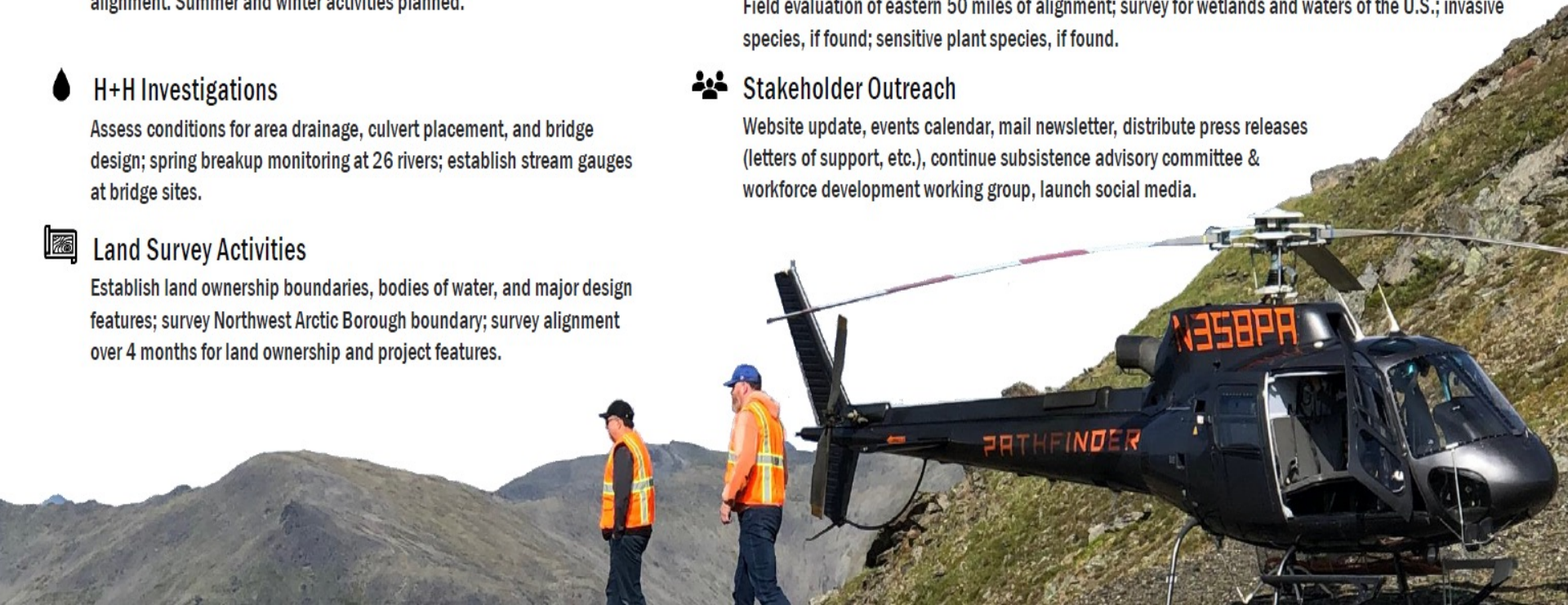
Wetland Investigations

Field evaluation of eastern 50 miles of alignment; survey for wetlands and waters of the U.S.; invasive species, if found; sensitive plant species, if found.



Stakeholder Outreach

Website update, events calendar, mail newsletter, distribute press releases (letters of support, etc.), continue subsistence advisory committee & workforce development working group, launch social media.



DISCOVERY TO PRODUCTION

It takes nearly 17 years to bring a resource to production



12.5 Years

Discovery, exploration to feasibility



1.8 Years

Construction
planning



2.6 Years

Construction
to production

Source: IEA report (<https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>)

Source: IEA report (<https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>)

Discovery, exploration to feasibility

Construction
planning

Construction
to production

CHALLENGES

- Long development periods
- Uncertainty of regulatory approvals
- Disinformation campaigns
- Litigation
- Labor shortages
- Inflation

OPPORTUNITIES

- Domestic supply chain of critical minerals
- Responsible resource development
- Good paying jobs for all Alaskans
- Growth opportunities to Alaskan vendors and service providers
- Revenue generation for the State and Tribes



THANK YOU

AMBLERMETALS.COM