

EXECUTIVE SUMMARY

GENERAL INFORMATION AND CONTACTS

Rainy River Resources (RRR) has been exploring the Rainy River Gold Project (RRGP or the Project) property since 2005, with the objective of developing a gold mine and milling complex on the site. RRR proposes to construct, operate and eventually reclaim a new open pit and underground gold mine, the RRGP, at the Project site.

Project Name: Rainy River Gold Project

Proponent: Rainy River Resources Ltd.

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RRR is an active member of the local community with offices in both Emo and Thunder Bay that offer residents easily accessible locations to learn about the RRGP. RRR has engaged the local communities as well as First Nations and Métis community members. Through meetings, site tours and regular communications, RRR strives to ensure engagement with all members of the local communities. Key stakeholders and Aboriginal groups who are expected to have an interest in the RRGP going forward were identified during the early consultation efforts and can be considered in the following categories:





Federal Government:

- Aboriginal Affairs and Northern Development Canada,
- Canadian Environmental Assessment Agency,
- Environment Canada,
- Fisheries and Oceans Canada,
- Health Canada,
- International Joint Commission (Canada United States),
- Major Projects Management Office,
- Natural Resources Canada and
- Transport Canada;

Provincial (Ontario) Government:

- Ministry of Aboriginal Affairs,
- Ministry of Agriculture, Food and Rural Affairs,
- Ministry of Economic Development and Trade,
- Ministry of Energy,
- Ministry of Health and Long-Term Care,
- Ministry of Infrastructure,
- Ministry of Labour,
- Ministry of Municipal Affairs and Housing,
- Ministry of Natural Resources,
- Ministry of Northern Development and Mines,
- Ministry of the Environment,
- Ministry of Tourism, Culture and Sport,
- Ministry of Transportation,
- Hydro One Networks Inc. and
- Ontario Provincial Police;

Municipal Government:

- Township of Chapple,
- Township of Morley,
- Town of Emo,
- Town of Fort Frances and
- Town of Rainy River;

Business, organizations and non-governmental organizations:

- Ainsworth Lumber,
- Borderland Snowmobile Club,
- Camp Narrows Lodge,
- · Clearwater Lodge,
- Confederation College,
- Fort Frances Chamber of Commerce,





- Fort Frances Sportsman's Club,
- Gateway North Outfitters,
- Riverside Health Care Facilities,
- Mining Watch Canada,
- Natural Resources Advisory Committee,
- Northwatch,
- Northwest Catholic District School Board.
- Ontario Federation of Anglers and Hunters,
- Rainy Lake Conservancy,
- Rainy River Cattleman's Association,
- · Rainy River District School Board,
- Rainy River District Social Services Administration Board,
- Rainy River District Stewardship,
- Rainy River Future Development Corporation,
- Rainy River Outfitters,
- Rainy River Trapping Council,
- · Resolute Forest Products and
- Other local small business owners;
- First Nations and Métis Groups:
 - Anishinaabeg of Naongashiing (Big Island) First Nation,
 - Couchiching First Nation,
 - Lac La Croix First Nation,
 - Mishkosiminiziibiing (Big Grassy River) First Nation,
 - Mitaanjigamiing (Stanjikoming) First Nation,
 - Naicatchewenin First Nation,
 - Nigigoonsiminikaaning (Nicickousemenecaning) First Nation,
 - Rainy River First Nation,
 - Seine River First Nation,
 - Métis Nation of Ontario and
 - Rainy River Lake of the Woods Métis Consultation Committee Region #1 (which includes the Sunset County Métis Council); and the
- General public.

The RRGP is anticipated to require completion of a Federal Environmental Assessment (EA), pursuant to the *Canadian Environmental Assessment Act, 2012*. If the Canadian Environmental Assessment Agency determines that a Federal EA is required, the Project Description will be used to develop Environmental Impact Statement Guidelines, which defines the scope of the Federal EA required for the project.





In addition to needing to meet Federal EA requirements pursuant to the *Canadian Environmental Assessment*, RRR entered into a Voluntary Agreement with the Ontario Ministry of the Environment to conduct a Provincial EA for the RRGP that will meet the requirements of the Ontario *Environmental Assessment Act*. Several aspects of the RRGP were anticipated to require completion of Provincial EA process(es) and a single Provincial process coordinated with the required Federal EA process, was selected as the best approach to meet those (or other) needs.

It is fully expected that the same body of information will be use to inform both the Provincial and Federal EA processes, culminating in a single EA report that meets both the Federal Environmental Impact Statement Guidelines and the approved Provincial Terms of Reference. Where possible, consultation activities for both processes will be coordinated, but nonetheless, the comments gathered during all consultation activities will be used to inform both EA processes. After the EA processes are completed, environmental approvals will be required to construct, operate and close the RRGP.

PROJECT INFORMATION

RRR is a publicly traded company that proposes to develop and operate the RRGP in order to provide shareholders with a reasonable return on investment. The underlying rationale for the RRGP is the strong demand for gold in the global marketplace. With gold prices at sustained high levels, the economics of the RRGP are expected to be such that RRR can successfully produce gold and provide shareholders with value.

In addition to the identified global demand for gold, there is a local and regional need in northwestern Ontario for economic development. The RRGP will have an even greater economic influence on the region providing construction and permanent employment opportunities for a large number of people. The region has experienced recent declines in both employment and population in large part related to the protracted downturn in the forestry industry.

The Federal Regulation Designating Physical Activities identifies the physical activities that constitute the designated projects that could require completion of a Federal EA. The following sections may apply to the RRGP:

- Section 8: "The construction, operation, decommissioning and abandonment of a facility for the extraction of 200,000 m³/a or more of ground water,...."
- Section 15(d): "The construction, operation, decommissioning and abandonment of a gold mine, other than a placer mine, with an ore production capacity of 600 t/d or more."





Physical works related to the RRGP are proposed to consist of:

- Open pit: approximately 200 hectare surface area and 300 to 400 metres in depth.
 Mining is proposed to occur at a rate of approximately 20,000 tonnes per day of ore production, with a mine life of approximately 15 to 20 years.
- Underground mine: approximately 2,000 tonnes per day developed to a depth of about 800 m below surface. (note: combined open pit and underground production will remain at approximately 20,000 tonnes per day)
- Mineral waste stockpile(s): approximately 70 to 80 million tonnes of overburden and 300 to 400 million tonnes of mine rock not required for site construction purposes will be stored in surface stockpiles. A low grade ore stockpile may also be developed.
- Primary crusher and processing plant: ore will be processed onsite to produce doré bars for sale under longterm contracts.
- Tailings management area: an area for tailings management area development has been selected that measures approximately 1,500 hectares and would provide capacity for the storage of a minimum 110 million tonnes of tailings over the projected mine life. The maximum projected dam heights are expected to be in the range of 20 to 25 metres above grade.
- Transmission line: power for later construction and operations phases is proposed to be supplied by a 230 kV transmission line connected to the existing Hydro One Networks Inc. line approximately 20 km northeast of the proposed RRGP site.
- Relocation of gravel-surfaced Highway 600: RRR proposes to realign a portion of gravel-surfaced Highway 600 south of the mine development, to re-connect to the existing local road network for public safety reasons in accordance with Provincial approval requirements.
- Associated buildings, facilities and infrastructure: additional permanent facilities currently
 planned for the RRGP are expected to include a maintenance garage, warehouse and
 administration complex, potential accommodations complex(es), fuel storage, laydown
 area(s), explosives manufacturing and storage facilities, access roads and nonhazardous waste facilities. These facilities will be supported by related piping and power
 infrastructure as needed.

Primary construction phase activities will include:

Completion of engineering studies and environmental approvals processes;





- Procurement and movement of construction materials to identified laydown areas;
- Initiation of open pit mine development, and portal development for underground mining operations (potentially only during the operations phase);
- Preparation of onsite mineral waste handling facilities, including tailings management area dams;
- Establishment of watercourse diversions, intake structures and site drainage works;
- Construction of associated buildings and facilities, fuel tank farm and landfill (if developed);
- Construction of the gravel-surfaced Highway 600 realignment and Pinewood River crossing, and redirection of local traffic; and
- Construction and energizing of a 230 kilovolt feeder transmission line.

Activities that will be carried out during the operations phase are anticipated to include:

- Ore and mine rock extraction (open pit and underground mines);
- Ore processing (conventional whole ore cyanidation followed by in-plant cyanide destruction, using extensive water recycle);
- Production of gold doré bars containing minor silver content;
- Mineral waste management (stockpiling of overburden and mine rock; and piping and storage of mill tailings in a surface tailings management area);
- Ongoing environmental management; and
- Progressive site reclamation where practical.

Decommissioning Phase activities will consist of the closure and reclamation of the various project components, including the 230 kilovolt transmission line. The proposed watercourse diversions and Highway 600 will remain in place. Ongoing environmental monitoring and site management will occur as needed after decommissioning activities are completed.

KEY ENVIRONMENTAL ASPECTS

Air emissions will derive from point source and fugitive sources, with fugitive sources (dust) likely to contribute the majority of the air emissions. The primary point source air emissions are





expected to be particulate (dust) from the conveyors and crusher(s). Measures will be taken to minimize dust creation at the plant site and to utilize dust collection / suppression devices where practical. Greenhouse gas emissions will derive principally from diesel fuel combustion in heavy equipment operation, and with diesel-fired power generation during the mine construction phase (if required). Onsite greenhouse gas emissions will be minimized by utilizing a transmission line as the primary power supply source.

The principal anthropogenic noise sources at the Project site are expected to derive from open air, heavy equipment operation. Plant site operations including crushing and grinding operations will be enclosed and associated noise emissions are expected to be minor in comparison to open air noise sources. Noise source modelling will be carried out to ensure that noise and noise related effects are fully considered during engineering design such that regulatory requirements are met.

Tailings will be pre-treated for cyanide destruction prior to pumping to the tailings management area for further treatment as needed. The tailings management area (potentially in conjunction with a secondary / minewater pond if developed) will provide sufficient retention and holding capacity to ensure that effluent quality meets applicable regulations. Site runoff and open pit mine water (including runoff / precipitation reporting to the pit) is also expected to be pumped to the tailings management area for treatment as needed prior to release to the environment.

Other solid and liquid wastes produced during the construction and operations phase will be handled and treated onsite as appropriate (such as sewage treatment plant and demolition landfill), or transported offsite (such as for the limited quantities of hazardous wastes) for handling, treatment and/or storage according to applicable regulatory requirements.

A preliminary schedule for the development of the RRGP has the construction phase commencing after completion the Federal and Provincial EA processes, which is currently planned for the second quarter of 2014. The operation and production phase are planned to start in the first quarter of 2016 and continue for a 15 to 20 year mine life. Closure and decommissioning is therefore anticipated to begin in 2031 at the earliest.

PROJECT LOCATION INFORMATION

The RRGP is located in the Township of Chapple, District of Rainy River, in northwestern Ontario, approximately 65 kilometres northwest of Fort Frances, and 420 kilometres west of Thunder Bay (Figure ES-1). The Universal Transverse Mercator coordinates for the centroid of the proposed open pit are at 425660E, 5409700N (NAD 83 Zone 15). The RRGP site and surrounding lands are dominantly privately held, with RRR holding a very large private land package.

Figure ES-2 shows the RRGP in relation to the existing site features. The area exhibits variable, gently undulating terrain, and is drained principally by the Pinewood River and its associated tributaries. The Project site is located in a low density rural area within which some limited





agricultural (focused on cattle and fodder cropping) and logging activities occurs. Adjacent areas show mainly second growth poplar-dominated forests and wetlands.

FEDERAL INVOLVEMENT

There is no proposed or anticipated Federal funding associated with the Project and no facilities or activities are proposed on Federal lands, including First Nation Reserves.

It is believed that the RRGP will require completion of an EA pursuant to the *Canadian Environmental Assessment Act, 2012.* Federal approvals expected to be required for the construction, operation and decommissioning of the RRGP may include: Authorization(s) under the *Fisheries Act,* approvals under the *Explosives Act* and *Navigable Waters Protection Act*, and a requirement for listing on Schedule 2 of the Metal Mining Effluent Regulations.

PROVINCIAL (ONTARIO) INVOLVEMENT

RRR initiated the Provincial EA process, through the submission of a draft Terms of Reference to facilitate ongoing public consultation on the Project. The draft Terms of Reference is being revised based on comments on the document and the result of open houses, and will be reissued as the proposed Terms of Reference for public comment. This subsequent document once approved, will set out the framework for the Provincial EA process. On completion of the Provincial EA process, Provincial environmental approvals to construct and operate the RRGP can be issued. These are expected to include: Permit(s) to Take Water (Ontario Water Resources Act); Environmental Compliance Approval(s) (Environmental Protection Act); Work Permit(s) or other Approval(s) (Public Lands Act / Lakes and Rivers Improvement Act); Aggregate Permit(s) (Aggregate Resources Act); Species at Risk Screening (Endangered Species Act); various transportation-related approvals (Highway Act); and a Closure Plan (Mining Act). Other environmental approvals could be required depending on the final engineering design.

ENVIRONMENTAL EFFECTS

Lands in the immediate Project site vicinity are typically gently rolling to flat, with forested wetlands occurring in low-lying areas, and rounded bedrock outcrops and subcrops occurring in upland areas. Much of the area has been cleared for agricultural development, except where rock outcrop and wetlands occur. Local drainage systems are characterized by numerous small creeks draining to the Pinewood River, which drains most of the Project site area. The natural drainage systems have been altered near the RRGP site through the development of agricultural drains, road development and ongoing beaver activities. There are no lakes within 10 km of the site and the closest lakes beyond this distance are small headwater lakes such as Pinewood Lake to the east. Area creeks are also small and frequently intermittent in nature. Surface water quality in the area is generally quite good, typically meeting Provincial Water Quality Objectives and Canadian Environmental Quality Guidelines for the protection of aquatic life





Studies of fisheries and aquatic resources included habitat assessments and fishing efforts focused on the Pinewood River system and its tributaries. Large-bodied species (Northern Pike, Brown Bullhead and White Sucker) were generally found only in the Pinewood River, and not in the smaller tributaries. The benthic community exhibits a low-to-moderate abundance, and is dominated by crustaceans and chironomids.

Small-bodied fish and some aquatic species may be affected by Project activities due to overprinting by proposed site facilities, reductions in flow or diversion to avoid site facilities. Watercourses in the vicinity of the open pit have the potential to have reduced flows as a result of pit dewatering during operations and water takings. Diversion around the proposed open pit will be required for West Creek, and may be required for the Pinewood River. Water may be taken from the Pinewood River and other local creeks to support the Project. Treated discharges from the site are proposed to be discharged to the Pinewood River. Discharges will meet all applicable Federal and Provincial effluent discharge requirements and will be protective of receiving water aquatic life.

The relatively high avian species diversity present in the area reflects the mosaic of principal habitats in the areas (forest, wetlands, fields and shrublands), and the transitional (or near transitional) position of the study area relative to the Great Lakes, Boreal and Prairie regions. Twenty-two mammal species have been identified in the RRGP environs through direct observation, trapping records or signs. Amphibian and reptile surveys identified eight frog species and three reptile species. A total of 13 Species at Risk are known to occur in the regional area. Of these, three species are listed Provincially as Threatened, resulting in a potential requirement for a Provincial Species at Risk Permit pursuant to requirements of the *Endangered Species Act*, if the proposed Project activities are likely to harm the species in question or its habitat. There are no Federal lands within the Project footprint and therefore, Federal Species at Risk Permits will not be required.

The mine site and related infrastructure development (Highway 600 and transmission line) will displace existing terrestrial habitat, dominantly low intensity rural lands, second growth poplar forests and wetlands. Limited effects on large predators and furbearers are expected, if any, due to the general lack of presence. Disturbance to migratory birds including Species at Risk, may be mitigated by compensatory habitat creation and the fact that there is abundant existing suitable habitat nearby which is not saturated by competitors.

There are no anticipated changes to the environment which may occur, as a result of carrying out the project, on Federal lands, in a province other than Ontario, or outside of Canada.

The RRGP is located primarily on private lands. The site does not overlap with any First Nation reserve lands or lands under land claim. RRR has been unable to date to identify any current Aboriginal use of land in the vicinity of the project site, but this work is ongoing.





ENGAGEMENT OF ABORIGINAL GROUPS

RRR requested advice from the Crown in 2010 as to which Aboriginal groups should be engaged regarding the RRGP due to potential impacts of exploration and mine development on Aboriginal or Treaty rights. Following from advice provided by the Provincial Crown at the time, RRR engaged nine First Nations that could be affected by RRGP along with the Sunset County Métis.

RRR is actively involving local Aboriginal groups in the project planning and has negotiated comprehensive agreements with a number of the local First Nations to set protocols and commitments for ongoing involvement for the life of the project and community benefits that would, in part, help mitigate any potential effects to Aboriginal or Treaty rights.

In May 2012, the Provincial government identified changes and expanded considerably the list of Aboriginal groups to be consulted or notified about mine development. The majority of which are located in the Lake of the Woods area, a considerable distance from the RRGP site. Engagement with these additional First Nations has been initiated. Engagement / notification of the following additional First Nations has been or will be initiated:

- Naotkamegwanning (Whitefish Bay) First Nation;
- Onigaming First Nation;
- Anishinabe of Wauzhushk Onigum First Nation (Rat Portage);
- Northwest Angle #33 First Nation;
- Northwest Angle #37 First Nation; and
- Buffalo Point First Nation as directed by government agencies.

The location of these First Nations and those initially engaged are shown on Figure ES-3.

Key issues and interests raised by Aboriginal groups to date are related to: environmental management; employment and benefits; fisheries and wildlife; Project components and mining; traditional land use and culture; and water resources.

While the RRGP is located primarily on patented lands or lands that have been used for forestry and agricultural purposes for several generations, RRR is nonetheless endeavouring to engage its partner First Nations in the collection and documentation of Traditional Knowledge and Traditional Land Use. The company feels that it is important to ensure that any traditional land uses be properly documented and used respectfully to avoid, or limit potential effects.





CONSULTATION WITH THE PUBLIC AND OTHER PARTIES

RRR believes that in order to be successful it needs to effectively engage the local communities. Stakeholders involved to date in the RRGP include those with a direct interest in the Project, or those who were able to provide data for baseline environmental reports such as Municipal and Provincial government department representatives, community—based service providers, economic development agencies and similar.

RRR has informed and involved the public and stakeholders in a variety of ways. The focus of early consultation was to introduce the Company, to inform citizens of the status of the exploration and mining-related activities and to provide information regarding future consultation opportunities. Consultation activities are now focused on gathering input for the Provincial and Federal EAs, and engaging stakeholders in the baseline data collection as appropriate.

Key comments received by RRR have consistently been related to employment and training opportunities prior to the release of the draft Terms of Reference (pursuant to the Provincial EA process). The region has experienced recent declines in both employment and population in large part related to the protracted downturn in the forestry industry, and development of the RRGP has received very strong Municipal and Provincial government, as well as First Nations support to date.

Subsequent to the release of the draft Terms of Reference, key comments received by RRR have continued to include employment and training opportunities. Additional issues and interests have however, been highlighted during consultation specifically related to the EA process: air quality and noise; baseline studies; ecological integrity and environmental management; fisheries and aquatic resources; socio-economic effects; tourism and recreation; vegetation and plant communities; water resources and management; wildlife; Highway 600 realignment; and transmission line.

RRR has made considerable efforts to engage stakeholders in the planning of the RRGP to date and will continue to do so. Information has been regularly posted to the RRR website and widely distributed in order to facilitate engagement. A draft Terms of Reference associated with the Provincial EA was issued for a 30-day public review period to facilitate early involvement in the RRGP EA processes. Multiple information events have been held to date and will continue to be held going forward.







