SECTION 3 NEW GOLD RAINY RIVER MINE COMMITMENT REGISTRY FEDERAL



Figure 18 Pinewood River south of open pit



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2.0 General Conditions

Condition 2.1

The Proponent shall, throughout all phases of the Designated Project, inform its actions in meeting the conditions set in this Decision Statement by the best available information and knowledge, based on validated methods and models, undertaken by qualified individuals and apply the best available economically and technologically feasible mitigation measures.

Status: Ongoing

Supporting Analysis:

In 2018 RRM continued to to engage the services of reputable consulting companies to provide qualified individuals for various activities, based on requirements of RRM obligations.

These activities included data collection, data analysis and report preparation for air, noise, fish tissue monitoring, biological monitoring and Species at Risk programs as well as monitoring of migratory birds, bird breeding activites and fish habitat compensation.

Data analysis and report writing for surface water, groundwater, RRM deer tissue program, as well as hydrometric data all utilized qualified experts.

A qualified professional Archaeologist was onsite to conduct Stage 4 archaeological study.

Qualified professionals were also involved in building the site water balance, sediment and erosion control work, closure plan design and reclamation activities.

All minor and major infrastructure onsite is designed and signed off by professionals as well.

On November 7, 2018, the Canadian Environmental Assessment Agency conducted an inspection at the mine. This allowed an opportunity for New Gold RRM to update CEAA on the mine progress.

Condition 2.2

Where consultation is a requirement of the conditions set out in this Decision Statement, the Proponent shall first consult Aboriginal groups on the most appropriate manner in which to engage in consultation with them.

Status: Ongoing

Supporting Analysis:

Consultation and engagement methods were significant discussion items throughout the EA process and in the negotiation of Impact Benefit and Participation Agreements. Active consultation and engagement with local communities continued through 2018. See section 7 for Consultation Registry.



The Proponent shall submit to the Agency an annual report on the implementation of the conditions set out in this Decision Statement with a supporting analysis for each of the conditions for the preceding calendar year on or before March 31, starting from the commencement of any activities in connection with the carrying out of the Designated Project. Each annual report shall describe how the Proponent has considered and incorporated the factors outlined in condition 2.1 in the implementation of the conditions set out in this Decision Statement.

Status: Completed

Supporting Analysis:

The annual report was submitted to the Agency on March 31, 2018. A digital copy can be found on the New Gold Website at http://www.newgold.com/projects/rainyriver/rainyriver-project. The public is also welcome to visit the New Gold office in Emo Ontario to review copies of the document.

Condition 2.4

The Proponent shall, in consideration of the annual report for condition 2.3, provide documentation to the Agency indicating the results of any monitoring for conditions 3.8, 4.6, 5.2, 5.3, 5.4, 6.4, and 8.4. The documentation shall demonstrate whether the mitigation measures have proven effective and whether the predictions made during the environmental assessment were accurate. The documentation shall also detail any corrective actions taken by the Proponent should the mitigation measures prove not to be effective.

Status: Ongoing

Supporting Analysis:

Documented results can be found in the appendices. See each condition in reference to appropriate appendix for all monitoring work that was completed in 2018.



Condition 3: Fish and Fish Habitat

Condition 3.1.1

The Proponent shall minimize changes caused by the Designated Project to water levels and water flows in the Pinewood River, the Minor Creek System, and the Modified Minor Creek System in such a way as to protect fish and fish habitat, by implementing mitigation measures including, but not limited to: recycling of water, for ore processing, from the TMA and ponds constructed for water management.

Status: Ongoing

Supporting Analysis:

In 2018, water from the open pit was directed to the Mine Rock Pond, under the authorization and subject to Conditions 3.2 through 3.5 of Permit to Take Water (PTTW) 7631-9VULMS, the WMP and TMA to assist in the milling of ore. The mine infrastructure was designed to encourage recycling of water. Water was also recycled from the Tailing Management Area Cells.

Water was withdrawn from the Pinewood River to continue to build the initial water inventory needed to start operations, under the authorization and subject to Conditions 3.2 and 3.3 of PTTW 8776-9W2QN3. It is not anticipated that there will be any discharges from the WMP to the Pinewood River until 2021, at which time water will only be discharged when Condition 5 of Environment Compliance Approval 5178-9TUPD9 is met. Prior to discharge New Gold will need to obtain a Lakes and Rivers Improvement Act Approval (LRIA) from the Ministry of Natural Resources and Forestry (MNRF) to construct a rock groyne, or alternative, in the Pinewood River for direct discharges from the WMP. The purpose of this groin is to; i) protect against erosion, ii) create a water mixing zone, iii) disperse water energy.

Condition 3.1.2

The Proponent shall minimize changes caused by the Designated Project to water levels and water flows in the Pinewood River, the Minor Creek System, and the Modified Minor Creek System in such a way as to protect fish and fish habitat, by implementing mitigation measures including, but not limited to: optimizing the timing, position and quantity of final effluent discharge between the final effluent discharge points.

Status: Ongoing

Supporting Analysis:

In 2018, the Tailings Management Area (TMA) Cell 2, Water Discharge Pond (WDP), Temporary Sediment Pond and Sediment Ponds 1 & 2 were commissioned, which increased the site capture of watershed drainage areas associated with the RRM. As per Condition 3.3 of Permit to Take Water (PTTW) 8776-9W2QN3, the volume of water captured by site catchments was included in the total direct taking from the Pinewood River. During the development of the Open Pit, there were construction related discharges to the environment subject to the Effluent Limits in Condition 7 of Environmental Compliance Approval (ECA) 5781-9VJQ2J. The construction related discharge points were obtained



through the Environment Canada Metal Mining Effluent Notification Process, and subject to the Metal Mining Effluent Regulations.

Condition 5 of ECA 5178-9TUPD9 dictates the discharge quality criteria, timing and volume restrictions for release of effluent from the four (4) final discharge points, Constructed Wetland Final Discharge, Water Management Pond Pipeline Discharge, Sediment Pond #1 and Sediment Pond #2. To date, there have been zero discharges from the specified final discharge locations.

Condition 3.1.3

The Proponent shall minimize changes caused by the Designated Project to water levels and water flows in the Pinewood River, the Minor Creek System, and the Modified Minor Creek System in such a way as to protect fish and fish habitat, by implementing mitigation measures including, but not limited to: filling the open pit during the decommissioning and abandonment phases in a manner which meets the flow requirements in the Pinewood River while allowing the pit to be filled as expeditiously as possible to reduce any adverse environmental effects.

Status: Not applicable in 2018.

Supporting Analysis:

The Closure Plan for the RRM outlines the close out and rehabilitation methods that will be used at the time of mine closure. With regards to the open pit, the pit walls will be reviewed by a professional engineer to insure compliance with the Ontario Mine Rehabilitation Code. Safety measures that include a berm, rock boulders and signage will be installed and then the pit will be allowed to fill naturally (rain, groundwater seeps) and from water inputs using a staged approach. This approach will involve water being taken from the Mine Rock Pond, seepage from the East Mine Rock Stockpile, and potentially runoff from the outside of the Tailings Management Area dams.

Additional water taking from the Pinewood River to enhance the rate of flooding is not currently under consideration. This option may be further evaluated during the life of the mine as additional flow data is obtained, and in consultation with regulatory agencies.

Flooding the final open pit is expected to take 60 to 75 years.

Condition 3.1.4

The Proponent shall minimize changes caused by the Designated Project to water levels and water flows in the Pinewood River, the Minor Creek System, and the Modified Minor Creek System in such a way as to protect fish and fish habitat, by implementing mitigation measures including, but not limited to: not taking water from the Pinewood River when flows are below the minimum threshold set by Ontario

Status: Ongoing

Supporting Analysis:

During 2018, water was taken from the Pinewood River to supplement the site water inventory, as permitted by the MECP under PTTW 8776-9W2QN3. Water taking commenced May 8, 2018 and continued until October 30, 2018, when flows were above the minimum threshold set by the MECP



and consistent with all other permit conditions. A total of 376,588 m³ of water was taken from the Pinewood River over 68 days at a rate determined by the Pinewood River flow on the specific days of taking.

Condition 3.2.1

The Proponent shall, for all effluent, comply with the MDMER, the Fisheries Act and any site-specific water quality requirements set by Ontario. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: treat effluent prior to discharge to the environment.

Status: Ongoing

Supporting Analysis:

In 2018, effluent discharges to the environment were from; overburden and mine rock stockpile ditching and pit dewatering systems that were constructed between 2015 and 2017. Effluent was generated from water associated with overburden dumps and mine rock stockpiles, and water associated with blasting bedrock for the advancement of the Open Pit. The discharge water had not been through the mill nor had it been in contact with Potentially Acid Generating material.

In 2018, any effluent that did not meet discharge criteria was pumped to the WMP to assist in building the water inventory and will receive further treatment prior to discharge to the environment.

To maintain compliance with Environment Canada Environmental Effects Monitoring requirements and the Environmental Compliance Approval (No. 5781-9VJQ2J) issued for the project, RRM conducts semi-annual sublethal toxicity testing of its primary final effluent, water quality monitoring, sediment quality monitoring, benthic invertebrate community monitoring and fish population monitoring. For 2018, this testing was not conducted as there were only 5 effluent discharges in April 2018, and there were no further discharges on which to conduct the testing.

Condition 3.2.2

The Proponent shall, for all effluent, comply with the MDMER, the Fisheries Act and any site-specific water quality requirements set by Ontario. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: treat tailings slurry to break down cyanide and precipitate heavy metals.

Status: Ongoing

Supporting Analysis:

Authorization to deposit tailings in the Tailings Management Area (TMA) Cell 2 was received on April 12, 2018. Before tailings slurry can be deposited in Cell 2, or any subsequent cell in the TMA, the slurry must be treated by an in-plant tailings slurry cyanide destruction (SO2/Air) treatment facility located in the process plant as permitted in Environmental Compliance Approval (ECA) 5178-9TUPD9. The Water Management Pond (WMP) received effluent flow from the TMA during 2018.

Water from the TMA will be pumped to the Lime WTP for treatment of primarily the following metals and metalloids: antimony, arsenic, cadmium, cobalt, mercury, molybdenum, nickel and zinc. After the removal of metals and metalloids, the treated water is then pumped into a nitrification treatment cell, where a microbial process termed "nitrification" is performed for treatment of ammonia. The



Nitrification treatment cell uses microbial nitrification to convert the nitrogen compounds (ammonia, cyanide, cyanate, and thiocyanate) to nitrate. Some amount of manganese is also expected to be removed in the nitrification cell. Water from the nitrification treatment cell is then pumped to Biochemical Reactor #1 for nitrate and nitrite treatment through the microbial process termed "denitrification". The outflow from the BCR #1 then reports to the WMP.

Along with the flow from the WMP during May and September, the WDP also collects seepage from the TMA and runoff from the surrounding environment. Water collected in the WDP is then directed to BCR #2 where the metals and metalloids treatment, as well as some sulphate treatment, will occur. Sulphate will partially be treated by reduction to sulphate by sulphide producing bacteria, after which metals and metalloids polishing through binding of metals sulphides will occur. Phosphorus will also be treated in BCR #2. At that water meeting criteria can be discussed. If it does not meet criteria, it will be pumped back from the outflow basin to the WMP for another pass through the treatment train. In the future discharge, the CWTS would be located downstream of BCR #2 and will provide polishing and redundancy in the treatment process. Eventually CWTS will replace the treatment train.

Phase 1 of the treatment train construction (nitrification cell, BCR1 and WTP) is under way and construction of BCR #2 and discharge basin 3 are scheduled for later in 2019.

Condition 3.2.3

The Proponent shall, for all effluent, comply with the MDMER, the Fisheries Act and any site-specific water quality requirements set by Ontario. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: collect site contact water and seepage in ditches and divert to either the TMA or water management facilities for release via final discharge points.

Status: Ongoing

Supporting Analysis:

Site water generated from blasting, overburden and mine rock stockpiles, and construction related activities is collected in a site impoundment structures. The water is diverted to either the Tailings Management Area (TMA), Water Management Pond (WMP) or Mine Rock Pond (MRP) for recycling and further treatment before eventual release via final discharge points. The Water Discharge Pond, Sediment Ponds 1 and 2 were commissioned in 2018. The WMP and TMA have seepage collection systems, or drainage ditches, and water from these collection systems is either put back into the structure or the water will first be recycled in mill processing prior to discharge into the TMA.

Condition 3.2.4

The Proponent shall, for all effluent, comply with the MDMER, the Fisheries Act and any site-specific water quality requirements set by Ontario. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: install and operate a water quality control structure in the constructed wetland to prevent the release of final effluent discharge not compliant with the Regulations or requirements

Status: Not applicable for 2018.

Supporting Analysis:



Construction of the treatment train started in 2019 will be completed in 2019 and will include a pump back system should water not meet discharge criteria at the final discharge points.

Condition 3.2.5

The Proponent shall, for all effluent, comply with the MDMER, the Fisheries Act and any site-specific water quality requirements set by Ontario. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: install secondary containment on pipelines that cross the West Creek Diversion Channel to prevent accidental discharge of effluent.

Status: This commitment is now complete and can be closed

Supporting Analysis:

Pipelines associated with mill processing and tailings transportation from the plant to the Tailings Management Area were installed in 2017. A design modification was completed which included secondary containment of the pipeline that cross the West Creek Diversion channel and where the pipeline crosses West Creek. The secondary containment consists of sleeves (pipe within a pipe) made from 36" high density polyethylene (HDPE). The rest of the pipeline has a double wall thickness for protection. The entire tailings pipeline also rest into a corridor which is also lined with a fused geomembrane and is sloped to drain into the multiple sumps in case of emergency

Condition 3.3.1

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: line the former Clark Creek channel (under the east mine rock stockpile) with non-potentially acid generating material.

Status: Ongoing

Supporting Analysis:

To comply with MDMER and provincial permitting requirements, effluent and passive outflow from the Potentially Acid Generating (PAG) rock drainage and metal leaching from active areas of East Mine Rock Stockpile area was collected in the Mine Rock Pond and associated seepage collection system. In Q1 of 2018, Clark Creek channel remnant was lined with non-acid generating rock under the East Mine Rock Stockpile area.

Condition 3.3.2

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: sort waste rock into potentially acid generating and non-potentially acid generating rock stockpiles through the development and implementation of a detailed mine rock segregation program using criteria for determining potentially acid generating material set by Ontario.



Status: Ongoing

Supporting Analysis:

A Geochemical Monitoring Plan for the Construction and Operation Phases was issued in accordance with MECP ECA 5178-9TUPD9 requirements and has been implemented at the RRM site. Monitoring was ongoing during 2018. See appendix A for Geochemical Monitoring Results.

Condition 3.3.3

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: design and construct the perimeter ditching around the east mine rock stockpile and low-grade ore stockpile to accommodate a 100-year flood event.

Status: Ongoing

Supporting Analysis:

Designs, to construct perimeter ditching that will accommodate a 100-year flood event for the East Mine Rock Stockpile (EMRS) and 25-year flood for the West Mine Rock Stockpile, were completed in 2017 and 2018 and are planned for construction in 2018 and 2019. Permanent ditching for the southern half of the EMRS was complete during 2018 and aligns the portion of the dump that has been constructed.

Condition 3.3.4

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: use potentially acid generating material only for the purpose of constructing the tailing management dam, where saturated conditions can be maintained. Potentially acid generating material must not be used for any other construction purpose.

Status: Ongoing

Supporting Analysis:

Potentially acid generating material is either used for construction of the interior of the Tailings Management Area, for padding of the overburden areas or for use to construct roads within the open pit.

Condition 3.3.5

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: place an engineered cover over the east mine rock stockpile and any remaining ore stockpiles at or before the decommissioning phase. The cover should be designed to prevent infiltration of water and to limit infiltration of air during the decommissioning and abandonment phases.



Status: Ongoing

Supporting Analysis:

An engineered cover will be placed over the east mine rock stockpile and any remaining ore stockpiles at or before the decommissioning phase as per sections 6.1 and 9.14 of the RRM Closure Plan (January 2015). During 2017 a stockpile containing potentially acid generating rock was covered with an engineered cover as per design in section 6.1 of the RRM Closure Plan. Further testing and monitoring was conducted in 2018 to assess first year of cover trial. See appendix T for the Pag cover Trial Factual Data Report.

Condition 3.3.6

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: cover the tailings with water and maintain the tailings in a perpetually saturated state during the decommissioning and abandonment phases.

Status: Not applicable in 2018.

Supporting Analysis:

At the time of mine closure New Gold intends on maintaining the tailings in a perpetually saturated state during the decommissioning and abandonment phases. Further information regarding mine reclamation and decommissioning can be found in the Updated RRM Closure Plan (March 2018). This condition currently doesn't apply to the operational state of the mine.

Condition 3.3.7

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: fill the open pit, in accordance with condition 3.1.3 and 3.1.4, as rapidly as practicable during the decommissioning and abandonment phases, using all available means, including directing drainage from the east mine rock stockpile into the pit.

Status: Not applicable in 2018.

Supporting Analysis:

During the decommissioning and abandonment phases, the open pit will fill and be managed according to the requirements specified in section 9.3 of the Rainy River Mine Closure Plan (March 2018). During the first 10 years of flooding, waters from the Mine Rock Pond will be piped into the open pit. Following this initial flooding period, seepage from the east mine rock stockpile area will be piped into the open pit. With the additional input of natural water sources (rain, ground water seeps, TMA dam runoff) it is estimated that it will take 60-75 years to flood the open pit.

Condition 3.3.8

The Proponent shall control acid rock drainage and metal leaching so that all effluent and passive outflow from the Project Site comply with the MDMER, any site-specific water quality requirements set



by Ontario, and the Fisheries Act, as applicable at any time. To ensure compliance, the Proponent shall implement, at a minimum, the following mitigation measures: control water quality in the open pit lake during the abandonment phase.

Status: Not applicable in 2018.

Supporting Analysis:

This condition is not relevant to the construction and operations phases. It will be implemented during the "closing out" stage of the RRM as stipulated in the Rainy RRM Plan (March 2018), Sections 9.3 and 10.2.

Condition 3.4

The Proponent shall design and construct new road watercourse crossings for the realignment of Highway 600 to allow for fish passage in accordance with the Environmental Guide for Fish and Fish Habitat.

Status: Complete

Supporting Analysis:

During the realignment of Highway 600 there was one water crossing required over a fish bearing watercourse located at the Pinewood River. In the fall of 2015, a clear span bridge was installed over the Pinewood River. There was no in water work required for the installation therefore no alterations to the original river channel that would impact or alter fish habitat or passage.

Condition 3.5

The Proponent shall design and construct new road watercourse crossings for the realignment of Highway 600 to meet the Highway Drainage Design Standards of the MTO.

Status: Complete

Supporting Analysis:

During the design phase of the Highway 600 realignment routine meetings were held between New Gold Inc. (formally Rainy River Resources) and the Ministry of Transportation of Ontario (MTO). The road and its associated crossings have been designed and constructed to meet MTO standards and was completed under the MTO Construction Administration and Inspection Task Manual (CAITM) protocol. Highway 600 was turned over to the MTO in 2017.

Condition 3.6

The Proponent shall design and construct water intakes meeting standards set out in the Freshwater Intake End-of-Pipe Fish Screen Guideline of the DFO.

Status: Ongoing

Supporting Analysis:

In 2016 the Pinewood River Pumphouse and Intake was completed and operated in 2017. This facility provides water to the Water Management Pond to utilize in mill processing in the event that there is not enough fresh water in the sites recycling process.



The pump intake enters the Pinewood River and is isolated by chain link fence that is installed below the high-water mark of the Pinewood River. In order to meet DFO guidelines and continue to allow successful suction of water, a fish screen was installed over the chain link fence running from the base of the Pinewood River to the above high-water mark.

During low flow periods, the screen is periodically monitored to ensure that it remains secure and free of debris.

Condition 3.7

The Proponent shall both offset any residual serious harm to fish in accordance with subsection 35(2) of the Fisheries Act and associated regulations, and compensate for the loss of fish habitat resulting from the deposition of a deleterious substance into a tailings impoundment area in accordance with the MDMER, by recreating fish habitat in the West Creek Diversion Channel, West Creek Pond, Stockpile Pond Diversion Channel, Stockpile Pond, Clark Creek Diversion Channel, Clark Creek Pond, and Teeple Road Pond.

Status: Ongoing

Supporting Analysis:

Fish habitat compensation was designed by qualified experts and was reviewed by the MNRF and the Department of DFO during the permit approval phase.

In 2016, Teeple Pond and Clark Creek Diversion channel construction concluded, and the system was commissioned that fall. In 2017 the design team conducted a review of the system and produced an Annual Monitoring Report for the DFO to meet the requirements of Fisheries Act Authorization No. 15-HCAA-00039. The review concluded substantial conformance between the as built specifications and the design criteria and that the area or replacement habitat was greater than the required 8.41ha.

Construction of the remaining offsetting habitat (West Creek Pond and Diversion Channel, Stockpile Pond and Diversion Channel, and Clark Creek Pond and Diversion Channel) was completed in July 2017. As part of fulfilling the as-constructed survey condition of the approval, an interim As-Constructed compensation measures review was conducted during 2017 and a report submitted to DFO. In 2018, monitoring was completed and indicated 7 of the targeted 9 minnow species had returned to the Clark Creek system while West Creek system had 12 minnow species return (success criteria target 9 species). This monitoring is planned to happen annually for the next 4 years.

In 2018 field research indicated 8 of the targeted 9 minnow species had returned to the system and were utilizing the constructed fish pools during periods of low water flow. This monitoring will continue for the next 3 years to ensure compliance with Fisheries Act Authorization No. 15-HCAA-00039. A copy of the Teeple Pond and Diversion Annual Monitoring Report can be found in the Supporting Documentation for this section.

Condition 3.8.1

The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures under conditions 3.1, 3.2, 3.3 and 3.7. In doing so, the Proponent shall monitor, at a minimum: water levels and flows, with respect to minimum flow thresholds for the Pinewood River set by Ontario, during periods of water taking as authorized pursuant to the Ontario Water Resources Act.



Status: Ongoing

Supporting Analysis

During 2015, a flow monitoring station was installed in the Pinewood River to track water level elevations and flow rates for the Pinewood River System. A flow monitoring station belonging to the Water Survey of Canada (WSC) is also located downstream of the project on the Pinewood River.

In April 2017, the Water Management Pond (WMP) was commissioned and direct water takings from the Pinewood River began to build the initial water inventory for operations start up. The water takings were in accordance with Permit to Take Water (PTTW) 8776-9W2QN3. The WMP will require monitoring for the life of the mine.

Under PTTW 8776-9W2QN3, New Gold was required to develop and submit a Biological Monitoring Plan that addresses methods for monitoring and identifying fish kills and fish stranding, and a contingency plan to address adverse effects. This monitoring plan was submitted in early 2016 and commenced upon MECP approval. The monitoring continued in 2017 and 2018.

The project has 5 additional PTTWs for the Mine Workings, Tailings Management Area (TMA), Construction Workings and Aggregate Dewatering. All water takings are monitored using calibrated flow meters and data obtained from these takings is submitted annually via the MECP online reporting protocol.

Condition 3.8.2

The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures under conditions 3.1, 3.2, 3.3 and 3.7. In doing so, the Proponent shall monitor, at a minimum: effluent quality as per the requirements set out in the MDMER.

Status: Ongoing

Supporting Analysis:

During 2018, effluent discharges to the environment as defined by the MDMER were related to temporary seepage collection, overburden and rock stockpile runoff, and pit dewatering systems. Effluent was generated from storm water runoff and contact water associated when blasting bedrock for the development of infrastructure foundations and open pit development. All water was treated in sumps and tested in accordance with applicable permits and legislation from EC, MECP, and DFO. In 2018 there were 5 effluent discharges from overburden and rock stockpile, and pit dewatering sediment ponds designed to capture contact water and provide adequate treatment for total suspended solids (TSS) and un-ionized ammonia prior to discharge to the environment. These discharges occurred in April 2018. All discharge water met the water quality objectives outlined in the EC, MDMER, and the MECP Environmental Compliance Approval (ECA).

Beginning April 2018, tailings from ore reclaiming was deposited in the TMA Cell 2 for treatment. Water quality objectives and sampling requirements for the Rainy River Mine are outlined in the MDMER and MECP ECA Operations. See Appendix B for MDMER Results.

Condition 3.8.3

The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures under conditions 3.1, 3.2, 3.3 and 3.7. In doing so, the



Proponent shall monitor, at a minimum: the effectiveness of recreated fish habitat. The monitoring shall be designed in accordance with any authorizations pursuant to subsection 35(2) of the Fisheries Act and associated regulations and/or the MDMER.

Status: Ongoing

Supporting Analysis:

Fish habitat compensation was designed by qualified experts and was reviewed by the MNRF and the DFO during the permit approval phase.

By the end of 2017, all fish habitat had been recreated. The As-Constructed Report for Teeple Pond and Diversion Channel was completed and submitted to the DFO at the end of 2016. The second year of monitoring had been completed in 2018. A monitoring report was submitted to the DFO at the end of 2018. This monitoring will occur for the next 3 years with a report submitted annually. See Appendix N for The Offset Plan for the Fisheries Act- 2018 Annual Report.

The As-Constructed Report for West Creek Pond, Stockpile Pond, Clark Creek Pond and associated diversions was submitted to the DFO at the end of 2017. In 2018, the first year of monitoring had been completed and the monitoring report was submitted to the DFO December 2018. This 2018 monitoring will occur for the next 4 years with a report submitted annually. See Appendix O Schedule 2 MDMER Fish Habitat Compensation Plan Annual Report.

Condition 3.8.4

The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures under conditions 3.1, 3.2, 3.3 and 3.7. In doing so, the Proponent shall monitor, at a minimum: the effectiveness of the potentially acid generating and non-potentially acid generating rock segregation program through ongoing geochemical verification of the waste rock during any period that waste rock is generated.

Status: Ongoing

Supporting Analysis

Potential acid generating and non-potentially acid generating rock is sampled and segregated per the Geochemical Monitoring Plan. See Appendix A for Geochemical Monitoring Results.

Condition 3.8.5

The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures under conditions 3.1, 3.2, 3.3 and 3.7. In doing so, the Proponent shall monitor, at a minimum: water quality in the open pit, pursuant to any requirements set by Ontario in the Mine Closure Plan for the Designated Project.

Status: Not applicable in 2018.

Supporting Analysis:

This condition is currently not relevant as the mine is in its operational phase.



Condition 3.8.6

The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures under conditions 3.1, 3.2, 3.3 and 3.7. In doing so, the Proponent shall monitor, at a minimum: the maintenance of a perpetually saturated state of the tailings, for 25 years from the start of the decommissioning phase of the Designated Project.

Status: Not applicable in 2018.

Supporting Analysis:

This condition currently does not apply to the project as the mine was in a construction and operational phase in 2018. However, the Closure Plan for the project outlines the process in which tailings will be rehabilitated in a saturated state.



Condition 4: Migratory Birds

Condition 4.1.1

The Proponent shall carry out all phases of the Designated Project in a manner that avoids harming or killing migratory birds, or disturbing, destroying or the taking of nests or eggs, with consideration of guidance provided in: Environment Canada's policy on Incidental Take of Migratory Birds in Canada.

Status: Ongoing

Supporting Analysis

In order to educate New Gold Employees and site contractors, the RRM Environmental Team has implemented site wide notices regarding the breeding bird window and the requirements for bird sweeps in new construction areas or areas that have been inactive for periods of time. A bird sweep is a method of walking an area in a grid system to ensure that no birds are nesting on the ground or nesting in tall grass areas. The Environment department is also the primary contact for any incidents or mortalities to birds, nests or eggs on site.

In 2018, there was one incident of mortality of a Barn Swallow which was found in the Truck Shop. See Appendix C for the Fledgling Incident Report. The doors to the Truck Shop almost always remain open due to the manner of work that is preformed there. The nest was well out of the way and was not discovered until a fledgling failed to return to the nest. Efforts were made to protect the bird so the parents could feed it, but this was unsuccessful. The incident was reported the MNRF and EC.

In 2019 the monitoring programs will continue and the Environmental team will continue to provide education to staff and site contractors.

Condition 4.1.2

The Proponent shall carry out all phases of the Designated Project in a manner that avoids harming or killing migratory birds, or disturbing, destroying or the taking of nests or eggs, with consideration of guidance provided in: Environment Canada's avoidance guidelines on General Nesting Periods of Migratory Birds in Canada.

Status: Ongoing

Supporting Analysis:

Starting in 2015 members of the RRM Environmental Team have been trained by qualified professionals on conducting bird sweeps and identifying bird species classified as Species at Risk (SAR). During 2018, 45 bird sweeps were conducted between April and August in construction areas to ensure the absence of nesting birds or species at risk prior to disturbance.

In areas where nests were found, appropriate buffers were flagged off around the perimeter of the buffer zone and the nests were monitored on a weekly basis until the nests were abandoned. Buffer zones were established based on input from consulting expertise in conjunction with discussions with the Ministry of Natural Resources and Forestry. Furthermore, the clearing of vegetation was prohibited during the breeding bird window. This program will continue in 2019. See Appendix D for the 2018 Species at Risk Report.

Condition 4.2



The Proponent shall, at all times, implement noise reduction measures to control sound levels from machinery to avoid harassing migratory birds.

Status: Ongoing

Supporting Analysis:

In 2018 New Gold continued to conduct Species at Risk Monitoring which included sound level monitoring in Eastern Whip-poor-will Receptor Habitats during May and June, 2018. Monitoring results exceeded the hourly sound criteria threshold three times. Reviews of all audio recordings found exceedances were related to natural phenomena and not construction or operation activities. Copies of the letter reports issued to the MNRF are included under appendices.

Condition 4.3

The Proponent shall install and use site lighting fixtures in a manner that reduces light pollution in the surrounding environment to avoid disturbance to nocturnal species, such as the Common Nighthawk (Chordeiles minor).

Status: Ongoing

Supporting Analysis:

New Gold is working towards installing more permanent lightning fixtures on the project to reduce the need to temporary light plants. Some temporary light plants are solar powered.

Temporary light plants are used only in areas where employees are working a night shift or if required for safety purposes. Light plants are designed so that lights can be angled toward the ground. During routine field inspections members of the Rainy River Environmental Department check lighting plants to ensure they are angled appropriately and used only when necessary. Monitoring and consideration to this condition will continue to be implemented as the project advances.

Condition 4.4

The Proponent shall deter migratory birds from using the tailings management area.

Status: Ongoing

Supporting Analysis:

During the open water season of 2018, the TMA was inspected daily by mill operators for birds as well as other potential issues. The current protocol is that Mill Operators are to contact the New Gold Environmental Department if birds are identified anywhere on the active TMA. Additional inspections are conducted by the Environmental Department frequently. To date when birds have been found on the TMA best efforts to haze them away have been made using certified bird hazing techniques (flares, noise making devises). The Environmental Department is reviewing the current process to see if adjustments are necessary for 2019.

Condition 4.5

The Proponent shall provide comparable replacement artificial nesting structures for Barn Swallows (Hirundo rustica) prior to the removal of existing nesting structures.

Status: Ongoing

Supporting Analysis:



At the commencement of construction in 2015, four artificial nesting structures were put in place during April, prior to the 2015 breeding season. New Gold has been monitoring the success of these nesting structures each year since 2015. Further information related to the monitoring program can be found in condition 4.8.

Following the breeding bird window in 2018, New Gold was required to remove a trailer home from the property that served as habitat for barn swallows. As the project advances additional homes and outbuildings will have to be torn down. At that time the need to develop additional artificial nesting structures will be investigated. If it is found that there is an increase in use of artificial nesting structures and competition for nesting habitat is observed, more nesting structures will be built.

Condition 4.6

The Proponent shall monitor migratory birds, breeding activity and mortality, to evaluate the effectiveness of mitigation measures under conditions 4.1 to 4.3. If monitoring demonstrates an inconsistency with those conditions, then document how this has been rectified. Monitoring starts at construction and ceases at the end of the decommissioning phase.

Status: Ongoing

Supporting Analysis:

During 2018 the RRM obtained the professional assistance of Wood PLC. to conduct appropriate monitoring of migratory birds and breeding activity in addition to site activities. Studies and activities included;

- Ongoing visual inspections of four artificial barn swallow nesting structures. The structures were installed on April 2015. Nesting was attempted in one structure in 2016 but did not reoccur in 2018.
- Development of a detailed Wildlife Monitoring Plan, approved MNRF in May 2016, which was implemented in 2016. The plan includes Species at Risk Monitoring during the operations phase as well as post mine closure, and acoustic monitoring in areas of non Whip-poor-will presence to ensure sound decibels are within an appropriate range. See Appendix E for the RRP Early Operations Acoustic Assessment Report.
- Targeted point count surveys for diurnal SAR including Golden-winged Warbler, Barn Swallow and Bobolink, and for woodland area-sensitive breeding birds in suitable habitat. Point counts will be based on standardized survey protocols described for the Ontario Breeding Bird Atlas Guide for Participants (OBBA 2001) so as to be consistent with baselines study methodology.
- Incidental data collection for SAR and provincially rare species which are currently present at lower abundance including: Canada Warbler, Olive-sided Flycatcher, Short-eared Owl, American Pelican, Bald Eagle and Black-billed Magpie.
- Targeted twilight surveys for Eastern Whip-poor-will in suitable habitat. Whip-poor-will monitoring efforts will follow standardized survey protocols as outlined in the whip-poor-will Roadside Survey Participant's Guide (BSC 2012).
- Concurrent data collection for Common Nighthawk to be undertaken during targeted Eastern Whip-poor-will surveys as described above as no standardized survey protocols have been developed specifically for this species.
- Annual monitoring of active Bald Eagle nests which occur in proximity to the RRM site. Monitoring will attempt to establish fledging success.
- Implementation of a wildlife log of general breeding bird observations at the RRM site by employees (focused on raptors and raptor nests, and SAR species); and In regard to mitigation strategies that are being implemented on the project to assist in monitoring and reduce adverse effects these include.



- Acquiring of 1468 hectares of lands to provide Eastern Whip-poor-will breeding territories and 348 hectares of field habitat suitable for Bobolink breeding habitat. These offset benefit lands are to compensate for habitat lost during the construction of the mine. Monitoring the success of these areas and potential impacts to the bird species is conducted through three phases; visual monitoring, monitoring of habitat use in the offset benefit lands and monitoring or rehabilitation plans during mine closure.
- Reduction of speed limits on the project to reduce vehicle collisions with birds
- Restricting habitat displacement for mine infrastructure to periods outside the breeding bird season (May 1 to August 15).
- In order to track mortality New Gold RRM has an onsite reporting system for employees to report any road collisions with birds and wildlife.

During 2018 there was one bird mortality reported, a juvenile barn swallow found in the truck shop. (additional information related to this incident can be found in Condition 4.1.1) See Appendix S for the 2018 Wildlife Monitoring Report

Condition 4.7

The Proponent shall monitor use of the tailings management area by migratory birds under condition 4.4 from the start of the operations phase to the end of the decommissioning phase.

Status: Ongoing

Supporting Analysis:

During the open water season of 2018, the TMA was inspected daily by mill operators for birds as well as other potential issues. The current protocol is that Mill Operators are to contact the New Gold Environmental Department if birds are identified anywhere on the active TMA. Additional inspections are conducted by the Environmental Department frequently. To date when birds have been found on the TMA best efforts to haze them away have been made using certified bird hazing techniques (flares, bangers, other noise making devises). The Environmental Department is reviewing the current process to see if adjustments are necessary for 2019.

Condition 4.8

The Proponent shall monitor the effectiveness of the artificial nesting structures created for Barn Swallows (Hirundo rustica).

Status: Ongoing

Supporting Analysis:

New Gold RRM Environmental team implemented the Bird Studies Canada Nest Watch protocol for monitoring the four artificial nesting structures located on site. Routine bi-weekly monitoring was completed between May and August 2018. There were no nesting attempts in 2018.



5.0 Health of Aboriginal Peoples

Condition 5.1.1

The Proponent shall, during the construction, operations, and decommissioning phases of the Designated Project, control exceedances of the Canadian Ambient Air Quality Standards and meet air quality requirements established by Ontario at the nearest human receptor by: implementing fugitive dust best management practices.

Status: Ongoing

Supporting Analysis:

During the construction and early operations phases, fugitive dust management practices followed the Fugitive Dust Best Management Practices Plan. Ambient air quality exceedances occurred in 2018 at the Gallinger Road ambient air quality station, were controlled by restricting light vehicle access along Gallinger Road and application of Calcium Chloride as a dust suppressant.

Condition 5.1.2

The Proponent shall, during the construction, operations, and decommissioning phases of the Designated Project, control exceedances of the Canadian Ambient Air Quality Standards and meet air quality requirements established by Ontario at the nearest human receptor by: maintaining site roadways to control silt loading.

Status: Ongoing

Supporting Analysis:

During 2018 site roadways were maintained to control silt loading by implementing the same measures that were utilized in 2017. This includes the application of Calcium chloride as a dust suppressant on light vehicle roads, restricting all haul traffic to designated heavy haul roads, using water as dust suppression when applicable on heavy haul roads, restricting speeds to 60 km on all site access roads and 40 km to 20 km on internal site roads, restricting commercial traffic to enter the site along East Access or Teeple Road, regular grading and placing of crush material on all site roads, restricting off-road activities, and constructing rock access roads into new areas during construction.

The Fugitive Dust Control Plan will be reviewed in and updated in 2019.

Condition 5.1.3

The Proponent shall, during the construction, operations, and decommissioning phases of the Designated Project, control exceedances of the Canadian Ambient Air Quality Standards and meet air quality requirements established by Ontario at the nearest human receptor by: using water sprays at the crusher and at active stockpiles.

Status: Ongoing

Supporting Analysis:

The primary crusher is equipped with a baghouse system to manage dust generated during the crushing process. At the end of 2017, a secondary water and chemical dust suppression system incorporating spray bars was also installed at the primary crusher. In 2018, water spray bars were installed during April to October at the active construction quarries.



Condition 5.1.4

The Proponent shall, during the construction, operations, and decommissioning phases of the Designated Project, control exceedances of the Canadian Ambient Air Quality Standards and meet air quality requirements established by Ontario at the nearest human receptor by: using dust control equipment.

Status: Ongoing

Supporting analysis:

During the early operations phase, the same dust control equipment utilized in 2017 continued usage into 2018. This included water trucks equipped with spray bars for road dust suppression, spray bars on mobile aggregate crushers, dust control curtains on production drills and dust cyclones on development drills. The primary crusher and conveyor system utilizes baghouses and a chemical spray system to control dust. In the mill processing area dust is controlled by a system of baghouses, wet scrubbers and specialized dust control equipment.

Condition 5.1.5

The Proponent shall, during the construction, operations, and decommissioning phases of the Designated Project, control exceedances of the Canadian Ambient Air Quality Standards and meet air quality requirements established by Ontario at the nearest human receptor by: using low-Sulphur diesel equipment and using pollution control equipment on mobile heavy equipment and meeting the Canadian Environmental Protection Act for the emissions from this equipment and vehicles.

Status: Ongoing

Supporting Analysis:

All preventative maintenance programs include a surveillance program to test emissions from mobile equipment. Pollution control equipment is installed on mobile heavy equipment that meets the Canadian Environmental Protection Act for the emissions from equipment and vehicles. Two air quality monitoring stations are also installed on site and routinely monitored to ensure there are no air quality exceedances.

Condition 5.1.6

The Proponent shall, during the construction, operations, and decommissioning phases of the Designated Project, control exceedances of the Canadian Ambient Air Quality Standards and meet air quality requirements established by Ontario at the nearest human receptor by: revegetating disturbed areas in a manner that minimizes all exposed dust sources.

Status: Ongoing

Supporting Analysis:

In 2018, revegetating disturbed areas to minimize exposed dust sources was performed in the Tait Quarry area. Stabilization and revegetation of the quarry was completed as per regulatory requirements.



Condition 5.2

The Proponent shall monitor air quality to evaluate the effectiveness of mitigation measures under condition 5.1. Monitoring starts with construction and ceases at the commencement of the decommissioning phase.

Status: Ongoing

Supporting Analysis:

An ambient air quality monitoring program was continued during 2018. Two air quality sampling stations, established in May 2015, located east of the site on Gallinger Road and one to the south of the site near the beginning of the Highway 600 reroute on Tait Road.

These stations are equipped with hi-vol samplers (brush motor and mass flow controlled), PQ200 samplers, dustfall samplers, and passive sampling for SO2 and NO2.

The hi-vol samplers measure Total Suspended Particulate (TSP) and metal concentrations averaged over 24-hour period. The metals and metalloids analyzed include arsenic (As), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), manganese (Mn), nickel (Ni), selenium (Se), vanadium (V), and zinc (Zn).

The PQ200 samplers measure Particulate Matter 2.5 (PM2.5) concentrations averaged over a 24-hour period. The dustfall samplers measure total dustfall deposition over a 30-day period. Passive sampling measures SO2 and NO2 concentrations over a 30-day period.

There were two TSP and metal exceedances measured in Q2 of 2018 at the Gallinger Station. Both were attributed to increased light vehicle traffic utilizing the road that passes directly beside the station. Mitigation measures included restricting traffic along the road and utilizing calcium chloride as a dust suppressant. See Appendix F for 2018 Air Quality Results. See Appendix I for the 2018 Exceedance Table.

Condition 5.2.1

The Proponent shall alert the Aboriginal groups in cases of exceedances of the Canadian Ambient Air Quality Standards and air quality requirements established by Ontario at the nearest human receptor.

Status: Ongoing

Supporting Analysis:

All exceedances are reported indigenous groups through a weekly reporting procedure.

Condition 5.3

The Proponent shall monitor wells located within the open pit dewatering zone of influence, used by Aboriginal groups for drinking water, for water quality and quantity. Monitoring starts with construction and ceases after the first 10 years of the decommissioning phase.

Status: Ongoing

Supporting Analysis:



Through the consultation phase and up to the end of 2018, New Gold has not been informed of the locations of any wells utilized by indigenous groups within the proximity of the open pit dewatering zone of influence.

In 2017, New Gold implemented a drinking well sampling program for residents surrounding the project boundary. To date there have been no issues reported to New Gold regarding wells from any of the neighboring land owners. See appendix U 2018 Offsite Groundwater Monitoring Report.

Condition 5.3.1

The Proponent shall alert Aboriginal groups who use wells located within the open pit dewatering zone of influence for drinking water in cases of exceedance of water quality standards established by Ontario. The Proponent shall alert these Aboriginal groups as soon as possible once any exceedance is detected.

Status: Ongoing

Supporting Analysis:

To date New Gold has not been informed of any wells used by indigenous groups within the Open Pit zone of influence.

Condition 5.4

The Proponent shall monitor key contaminants, including mercury, arsenic, cadmium and lead, for their concentrations in Northern Pike (Esox lucius) and Walleye (Sander vitreus) in the Pinewood River. Monitoring starts with construction and ceases 10 years after the start of the decommissioning phase.

Status: Ongoing

Supporting Analysis:

During September of 2018 Minnow Environmental Inc. conducted a fish tissue monitoring program at selected points along the Pinewood River, downstream of the RRM extending approximately 500 m upstream of the confluence with the Rainy River. The focus of this study was to collect tissue samples from northern pike and walleye. Fifteen individuals of each species were sacrificed for the study. les, were collected from each fish. Muscle, liver and ovary tissue samples were collected from each fish and sent to a certified laboratory for to be analyzed for chemicals of potential concern. These include metalloids such as arsenic, boron, cadmium, cobalt, copper, chromium, iron, lead, manganese, mercury, molybdenum, nickel, selenium and zinc. This is the fourth consecutive year that New Gold has completed this study. Results obtained from the 2018 study are consistent with results from previous studies (2015, 2016 and 2017) and 2012 baseline study. Data from the 2018 study indicate that the RRM has not influenced the concentrations of metals in muscle, liver and ovary tissues of northern pike and walleye fish species.

Further studies will be conducted in 2019. A copy of the 2018 report on Fish Tissue Quality Monitoring can be found in the Supporting Documentation in Appendix G.

Condition 5.4.1

The Proponent shall alert the Aboriginal groups in cases of exceedance of provincial, federal or international health-based criteria. The Proponent shall alert these Aboriginal groups as soon as possible once any exceedance is detected.



Status: Ongoing

Supporting Analysis:

All Exceedances are reported to the indigenous communities via the appropriate reporting procedures. Ex. Spill Reporting is completed and distributed weekly.

5.5 The proponent shall consult with the Aboriginal groups on the implementation of conditions 5.2, 5.3 and 5.4.

Status: Ongoing

Supporting Analysis:

During the Environmental Assessment permitting phase of the New Gold RRM, indigenous Communities were consulted regarding the project and potential impacts related to conditions 5.2 to 5.4 (air, fish, water quality). Since the approval of the EA New Gold has continued Aboriginal Community involvement by;

- Establishing Environmental Monitoring Boards in 2016. The purpose of these meetings is to ensure community members are engaged in environmental aspects of the project. Some topics that are discussed include; environmental monitoring results (ie; air quality, wildlife monitoring, dear tissue sampling programs, fish tissue sampling programs), exceedances or environmental spills, project design (tailings management, reclamation).
- Conducting on-site tours and discussing fish salvage programs, water quality sampling protocols and sampling results and other environmental monitoring requirements
- Providing email notifications to indigenous Communities regarding environmental exceedances (air, water and environmental spills)
- Inviting First Nation members to participate in fish tissue sampling programs and fish salvage programs.



6.0 Current use of Lands and Resources for Traditional Purposes:

Condition 6.1

The Proponent shall provide access to private lands to Aboriginal groups for their current use of land, including hunting and plant harvesting.

Status: Ongoing

Supporting Analysis:

New Gold provides access to private lands where it is safe to do so. On a regular basis, New Gold also provides site tours to community members, so they are familiar with the lands.

Condition 6.2

Current use of Lands and Resources for Traditional Purposes: The Proponent shall avoid use of herbicides along the transmission line corridor unless required to prevent fire hazards. The Proponent shall minimize the removal of non-woody vegetation within the transmission line corridor.

Status: Ongoing

Supporting Analysis:

Over the life of the Mine the line will be inspected and if necessary, vegetation that would impact the line may need to be managed. The use of herbicide for vegetation management is not intended.

During 2018 there was no need to manage vegetation along the transmission line.

Condition 6.3.1

The Proponent shall, throughout all phases of the Designated Project, undertake progressive habitat restoration as per any requirements set by Ontario in the Mine Closure Plan for the Designated Project. Habitat restoration shall include: a consideration of habitat types that support a diversity of wildlife species and traditional uses by Aboriginal peoples, including ungulates and furbearers, as well as native plant species previously collected at the Project Site for food and medicinal purposes.

Status: Ongoing

Supporting Analysis:

During 2018, native seeds and plant species were used in areas where re-vegetation occurred. Preliminary earthworks also took place to establish the area of the vegetation test plots. These plots will be used to test different plant and tree species with an array of surface treatments. Consultation began in 2018 with First Nation communities to determine the different plant species that could be used at closure for medicinal and traditional purposes. The vegetation test plots are scheduled to be completed in 2019 with monitoring commencing shortly after.

Condition 6.3.2

The Proponent shall, throughout all phases of the Designated Project, undertake progressive habitat restoration as per any requirements set by Ontario in the Mine Closure Plan for the Designated Project. Habitat restoration shall include: separating and stockpiling removed organic rich material during construction (of open pit and during tailings dam stripping) for use to support revegetation and other reclamation activities.



Status: Ongoing

Supporting Analysis:

During construction activities, organic rich material was separated and stockpiled in designated areas for use in revegetation and other reclamation activities. In 2017 and 2018 organic rich material was salvaged during development of areas within the East Mine Rock Stockpile, West Mine Rock Stockpile, Mine Rock Pond dam footprint, open pit water collection sumps, Tailing Management Area dam footprints and clay borrow pit areas.

Condition 6.4

The Proponent shall monitor habitat restoration to verify the success of revegetation efforts. Monitoring starts with construction and ends once habitat has been restored and proven effective.

Status: Ongoing

Supporting Analysis:

In the early stages of the RRM the largest construction undertaking that has seen the most reclamation is the creation of three manmade diversions to re-route former water systems known as the West Creek, Clark Creek and Teeple Drain. Construction of these diversion structures referred to as the West Creek, Clark Creek and Teeple Diversions commenced in 2015 with commissioning commencing in late 2016 and mid 2017. As part of the Fisheries and Oceans Canada approval process for these structures, New Gold is required to complete an annual monitoring report of the fisheries, fish habitat and compensation of these structures. In regard to habitat restoration, the 2018 reports indicate the following; Teeple, West Creek, Clark Creek ponds and diversions constructed habitat remains stable and in place. Shorelines and graded offset features are stable, and riparian vegetation cover and plantings have achieved moderate to good coverage and have reached the targeted 80% success criteria. This monitoring of these systems will continue annually until 2022. See Appendix N The Offset Plan for the Fisheries Act-2018 Report and Appendix O Schedule 2 MDMER Fish Habitat Compensation Plan.

Condition 6.5

The Proponent shall restore access to the Project Site for the Aboriginal groups during the decommissioning phase, to the extent that such access is safe, for their traditional purposes.

Status: This condition is not applicable in 2018.

Supporting Analysis:

This condition is not relevant to the current early operations phase of the project.

Condition 6.6

The proponent shall consult with the Aboriginal groups on the implementation of conditions 6.1, 6.4 and 6.5.

Status Update: Ongoing

Supporting Analysis:

6.1 Through negotiated agreements and in the Rainy River Project Indigenous Consultation Plan, New Gold has engaged Indigenous groups on accessing New Gold property.



- 6.4 Updates on habitat restoration and the success of revegetation efforts are provided during site tours and at Environmental Monitoring Board meetings.
- 6.5 Not applicable during the operations phase.



7.0 Aboriginal Archaeological, Heritage and Cultural Resources

Condition 7.1.1

The Proponent shall, for all phases of the Designated Project: avoid known culturally significant sites.

Status Update: Ongoing

Supporting Analysis:

Culturally significant sites were avoided in 2018.

Condition 7.1.2

The Proponent shall, for all phases of the Designated Project: assess additional culturally significant sites, if discovered.

Status Update: Ongoing

Supporting Analysis:

No culturally significant sites were identified in 2018.

Condition 7.1.3

The Proponent shall, for all phases of the Designated Project: establish a procedure for Aboriginal groups to safely access the Project Site for cultural and ceremonial purposes.

Status Update: Ongoing

Supporting Analysis:

A formal procedure was identified in Section 4.0 of the Aboriginal Consultation Plan (Provincial Environmental Assessment, Notice of Approval Condition 9) and issued to MECP on February 9, 2015. In 2018, revisions were made to the document name, contact information and updates made in response to MECP comments. The current version of the Indigenous Consultation Plan was issued to MECP on July 30, 2018.

Condition 7.1.4

The Proponent shall, for all phases of the Designated Project: preserve any discovered burial sites.

Status Update: Ongoing

Supporting Analysis:

No burial sites were discovered in 2018.

Condition 7.1.5

The Proponent shall, for all phases of the Designated Project: salvage and preserve any artifacts that cannot be maintained in-situ.

Status Update: Ongoing

Supporting Analysis:



New Gold had archaeologists on site to excavate archaeological sites as per Provincial Standards and Guidelines. The archaeologists currently hold the artifacts and will make arrangements to transfer the artifacts to appropriate facilities upon consultation with indigenous people.

Condition 7.1.6

The Proponent shall, for all phases of the Designated Project: transfer artifacts in condition 7.1.5 to a facility identified by Aboriginal groups, in consultation with the Ontario Ministry of Tourism, Culture and Sport.

Status: Ongoing

Supporting Analysis:

Artifacts will be transferred from the archaeologist once the reports for MTCS are complete and consultation with Indigenous groups regarding the artifacts is complete. No artifacts were transferred in 2018.

Condition 7.2

The proponent shall consult with the Aboriginal groups on the implementation of condition 7.1.

Status: Ongoing

Supporting Analysis:

No additional cultural sites were identified in 2018. Throughout the Environmental Assessment process, New Gold had engaged indigenous groups on previously identified cultural sites.



8.0 Subsection 5(2) effects related to components of the Designated Project that may be associated with federal authorizations

Condition 8.1.1

The proponent shall, in implementing condition 3.7, take measures to avoid or lessen adverse effects: on migratory birds and their habitats.

Status: Ongoing

Supporting Analysis

In order to lessen adverse effects on migratory birds and their habitats New Gold has implemented the following activities during the first year of construction (2015) and continued to carry these tasks through 2018;

- Establishment of compensation-related habitat and a monitoring and maintenance plan has been initiated (barn swallow nesting boxes and compensation lands).
- New Gold RRM is aware and has taken extra care with regards to the potential for effects on migratory birds during nesting periods. All employees receive Species at Risk training and information regarding nesting birds and the migratory bird act during site orientation. Frequent site wide information bulletins are also shared.
- 45 bird sweeps occurred in 2018 as a precautionary measure to ensure birds were not nesting in proposed areas for construction. A bird sweep is a method of walking a grid system in a proposed construction work zone to ensure that no birds are nesting in the area prior to the commencement of work. A sweep is valid for 72 hours.
- Mitigation measures used to deter birds from nesting in construction zones or landing on the Tailings Management Area include; deterrent cannons, netting over uninstalled pipes, culverts and openings, and 10,000+ stakes with reflective tape were installed to deter birds from future work areas.
- No tree clearing occurred during the breeding bird window (April to August).

Condition 8.1.2

The proponent shall, in implementing condition 3.7, take measures to avoid or lessen adverse effects: on terrestrial species, including amphibians and reptiles, and their habitats.

Status: Ongoing

Supporting Analysis:

The commissioning of the Teeple Diversion system commenced in 2016 followed by the commissioning of West Creek Diversion and Clark Creek Diversion in mid-2017. During the construction of the Teeple and Clark Pond turtle basking areas were developed using rocks and trees. Since the start of construction New Gold has obtained an annual Wildlife Scientific Collectors Authorization (License No. 1089610) from the Ministry of Natural Resources and Forestry which allows for the live trapping and relocation of turtles and snakes that are found in areas where they will be impacted by construction activities. During 2018 the license was not utilized. New Gold will apply for the license in 2019.

Monitoring of the success of the diversion structures and fish habitat compensation will be monitored over the next four years as part of the Department of Fisheries and Oceans Authorization. In an event



that maintenance activities are required, this condition will be reviewed for appropriate mitigation strategies.

Condition 8.1.3

The proponent shall, in implementing condition 3.7, take measures to avoid or lessen adverse effects: On species at risk (SAR) and their habitats.

Status: Ongoing

Supporting Analysis:

SAR are considered in all aspects of Mine activities and an assessment of SAR and their habitats in relation to the RRM can be found in the 2018 SAR report (See IPT-0054 Rev C).

Since the early construction stages of the diversions, New Gold has retained qualified biologists to conduct fish salvage programs in the creeks and wetlands that would be altered as part of the diversion design. A component of the salvage program was to identify species found. To date no SAR species have been identified during salvages.

Monitoring of the success of the diversion structures and fish habitat compensation will be conducted over the next four years as part of the Department of Fisheries and Oceans Authorization. In an event that maintenance activities are required, this condition will be reviewed for appropriate mitigation strategies.

Condition 8.1.4

The proponent shall, in implementing condition 3.7, take measures to avoid or lessen adverse effects: on current use of lands and resources for traditional purposes by Aboriginal peoples.

Status: Ongoing

Supporting Analysis:

The construction of fish habitat compensation to offset the impact of the TMA started in 2015 and was completed in 2017. The man-made ponds (4) and creek diversion systems contained fish habitat features suitable to existing fish species presence (minnows) and native plant species consistent to what was naturally growing on site. The construction of these features and loss of habitat associated with the construction of the TMA was shared with communities through the Environmental Assessment Permitting Phase as part of Public and Indigenous Consultation. All project design components related to compensation and reclamation were developed to reflect available Traditional Knowledge, naturally occurring features and previous land use considerations.

Monitoring of the success of the diversion structures and fish habitat compensation will be monitored over the next five years as part of the Department of Fisheries and Oceans Authorization. In an event that maintenance activities are required this condition will be reviewed for appropriate mitigation strategies. See Appendix N The Offset Plan for the Fisheries Act-2018 Report and Appendix O Schedule 2 MDMER Fish Habitat Compensation Plan.

Condition 8.1.5

The proponent shall, in implementing condition 3.7, take measures to avoid or lessen adverse effects: on sites of cultural significance to Aboriginal peoples.

Status: Ongoing



Supporting Analysis:

Creation of fisheries compensation related habitat was initiated during 2015, 2016, 2017 and completed in 2018 did not impact any identified sites of cultural significances to Indigenous peoples. Previous archeological assessments of the New Gold Rainy River Project property included Stage 1 through 4 assessments and excavation.

Monitoring of the success of the diversion structures and fish habitat compensation will be monitored over the next five years as part of the Department of Fisheries and Oceans Authorization. In an event that maintenance activities are required this condition will be reviewed for appropriate mitigation strategies.

Condition 8.1.6

The proponent shall, in implementing condition 3.7, take measures to avoid or lessen adverse effects: from potential sources of contamination (e.g. mercury, arsenic, cadmium and lead).

Status: Ongoing

Supporting Analysis:

The design and construction of the fisheries compensation features were created in a manner to reflect natural systems that will not be impacted by mine waste water that could be a potential source of contamination. No acid generating rock was used in the creation of rock features.

Monitoring of the success of the diversion structures and fish habitat compensation will be monitored over the next five years as part of the Department of Fisheries and Oceans Authorization. In the event that maintenance activities are required this condition will be reviewed for appropriate mitigation strategies.

Condition 8.2

The Proponent shall, in implementing condition 6.3, take into consideration the habitat needs of species at risk consistent with final recovery strategies or action plans, or alternatively, rely on best available information where recovery plans or action plans for the species are not yet completed for the species at risk.

Status: Ongoing

Supporting Analysis:

In 2018 New Gold completed the reclamation of the former Tait Quarry which operated between 2015 and 2017 to provide material for the construction of Highway 600. Through discussions with the MNRF in 2013 and 2014 it was decided that the Tait Quarry would be reclaimed to whip-poor-will habitat similar to that found in the gravel pit. Prior to its development, Tait Quarry was not considered to be suitable habitat for whip-poor-wills, which are a Species at Risk in the Rainy River District.

A consulting firm was retained by New Gold to design the reclamation plan which involves; ensuring the site is safe by sloping rock faces and banks to a minimum 2: 1 slope, leaving the pit floor as a pond, applying a topsoil, clay, organics mixture to areas where vegetation will be planted, planting trees and seeding with native species. Suitable plant species and habitat creation has been designed to mirror other areas known to be Eastern Whip Poor-Will habitat within the project boundary. In late fall of 2017 the earthworks component began and in summer of 2018 the vegetation component of the Tait Quarry reclamation plan was completed.



New Gold RRM considered Species at Risk and the potential for habitat creation in site restoration activities to date, in accordance with their Provincial Endangered Species Act permit.

Species at Risk monitoring was conducted in 2017 and the annual report was submitted to MNRF in January 2018 to fulfill condition numbers 7.2 and 7.3 of ESA FF-C-001-14.

Condition 8.3

The Proponent shall provide about 1400 hectares of private land as habitat for Eastern Whip poor-will (Antrostomus vociferous) and Bobolink (Dolichonyx oryzivorus).

Status: Closed

Supporting Analysis:

Prior to project development the MNRF determined that 18 identified Eastern Whip Poor-Will breeding territories could potentially be affected by the project's development and that 348 ha of Bobolink habitat had the potential to be impacted by the project. Based on this information to offset the loss of habitat, New Gold obtained 1468.3 ha of lands to provide Eastern Whip poor-will breeding territories and 348 ha of field habitat suitable for Bobolink breeding habitat.

Condition 8.4

The Proponent shall monitor the effectiveness of the habitat in condition 8.3.

Status: Ongoing

The RRM owns and monitors over 1800 ha of overall benefit land and are following the monitoring plan described in the 2018 SAR report. See Appendix D for the 2018 Species at Risk Report

Condition 8.5.1

The Proponent shall: maintain a fence around the tailings management area to prevent access by wildlife.

Status: Ongoing

Supporting Analysis:

In late fall of 2018, a 14 km wildlife exclusion fence was erected that encompasses the footprint of the TMA and WMP. This fence includes 8 km of reptile barrier, the remaining 6 km of reptile barrier will be completed in spring of 2019.

Condition 8.5.2

The Proponent shall: implement measures to prevent Snapping Turtles (Chelydra serpentine) from entering the following components of the Designated Project: tailings management area (TMA), water management pond (WMP), water discharge pond, constructed wetland, overburden pile, west mine rock pile and sediment ponds 1 and 2.

Status: Ongoing



Supporting Analysis:

8.5.2.1 - Tailings Management Area

In late fall of 2018 a 14 km wildlife exclusion fence was erected that encompasses the footprint of the TMA and WMP. This fence includes 8 km of reptile barrier, the remaining 6 km of reptile barrier will be installed in spring of 2019. No Snapping turtles were observed in the TMA in 2018.

8.5.2.2- Water Management Pond

In late fall of 2018 a 14 km wildlife exclusion fence was erected that encompasses the footprint of the TMA and WMP. This fence includes 8 km of reptile barrier, the remaining 6 km of reptile barrier will be installed in spring of 2019. No Snapping turtles were observed in the WMP in 2018.

8.5.2.3 - Water Discharge Pond

The WDP was completed in late fall 2018, no snapping turtles were observed during its construction. The WDP did not receive any mine effluent during 2018 and is not expected to during 2019, only surface run off has reported to the WDP. The WDP will be monitored for snapping turtles and if any are observed, efforts will be made to remove and exclude them before discharge of effluent to the pond.

8.5.2.4 - Constructed Wetland: Not constructed in 2018, differed to 2020-2021.

Water Treatment Train construction initiated in 2018 and to be completed in 2019. The treatment train consist of a Water Treatment Plant, a nitrification cell, two BCR and a discharge basin.

8.5.2.5 - Overburden Pile

Ditching is built with steep banks around the overburden stockpile to ensure turtles do not enter the overburden dump and silt fence was installed that will direct them away from the area. No snapping turtles were observed in or around the overburden stockpile in 2018.

8.5.2.6 - West Mine Rock Pile

Ditching around the area was complete in 2018. This ditching is built with steep banks to ensure turtles do not enter the stockpile area. No turtles were observed in the area in the 2018.

8.5.2.7 - Sediment Ponds 1 & 2

Sediment ponds 1 and 2 were completed in 2018, During construction of these ponds no snapping turtles were observed. The banks of the ponds are rock armored and geotechnical fabric lined so turtles will be discouraged from burrowing into them or climbing over them.



9.0 Accidents or Malfunctions

Condition 9.1.1

In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall; Notify the Agency and other relevant regulatory agencies of the occurrence as soon as possible.

Status: Ongoing

Supporting Analysis:

In the event of an accident or malfunction with the potential to cause adverse environmental effects, New Gold RRM has implemented a standard operating procedure for spill reporting and an emergency preparedness and response plan that obligates notification to the Agency and other relevant regulatory agencies of an occurrence as soon as possible.

Condition 9.1.2

In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall: implement measures to minimize any adverse environmental effects associated with the occurrence as soon as possible.

Status: Ongoing

Supporting Analysis:

In the event of an accident or malfunction with potential to cause adverse environmental effects, New Gold has implemented a site wide spill reporting procedure. The objective of this procedure is to implement measures to control and minimize adverse environmental effects associated with the event. This reporting procedure incorporates the site-wide emergency preparedness and response plan, if necessary.

Condition 9.1.3

In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall: submit a written report to the Agency as soon as possible in the circumstances, but at the latest 30 days after the day on which the accident or malfunction took place; the written report must include:

- 9.1.3.1 The measures that were taken to mitigate the effects of the occurrence;
- 9.1.3.2 If an emergency response plan was implemented, details concerning its implementation;
- 9.1.3.3 Changes made to avoid a subsequent occurrence of the accident or malfunction.

Status: Ongoing

Supporting Analysis:

In the event of an accident or malfunction with the potential to cause adverse environmental effects, New Gold shall follow the site wide spill reporting procedure and ECA#5178-9TUPD9 condition 11(4) which includes providing a written report detailing mitigation measures and changes made to avoid a reoccurrence. A copy of the report will be submitted to the Agency within 10 working days of the event as per ECA# 5178-9TUPD9 condition 11(4).

A copy of the Site Wide Spill Reporting Procedure (ENV-SOP-0001) and the Environmental Department Reporting Procedure (ENV-SOP-0002) can be found in Appendix H.



10.0 Implementation Schedule

Condition 10.1

The Proponent shall submit an implementation schedule for conditions contained within this Decision Statement to the Agency, or anyone designated pursuant to s. 89 of CEAA 2012, 15 days prior to construction.

Status: Complete

Supporting Analysis: This condition was completed on February 3, 2015.

Condition 10.2

The Proponent shall submit an update to this implementation schedule in writing to the Agency, or anyone designated pursuant to s. 89 of CEAA 2012, every two years on March 31, starting the year following the date of the initial submission of the implementation schedule until completion of the activities.

Status: Ongoing

Supporting Analysis:

An updated Implementation Schedule was included in the 2017 Annual Compliance Report that was submitted March 29, 2018.

Next due date for Implementation Schedule submission is March 31, 2020

Condition 10.3

The Proponent shall provide the Agency, or anyone designated pursuant to s. 89 of CEAA 2012, with notice of any implementation schedule changes from the initial schedule or any subsequent updates 30 days prior to the implementation of the change.

Status: Ongoing

Supporting Analysis:

An updated Implementation Schedule was provided to CEAA on September 8, 2017. There has been no changes for 2018.

