



10.0 BENEFITS TO CANADIANS

10.1 CHANGES TO PROJECT SINCE INITIALLY PROPOSED

As per the Federal EIS guidelines, the changes made to the Project since originally proposed have been summarized and include the benefits of these changes to the environment, Aboriginal peoples, and the public (Table 10.1.1).

Changes to the Project reflect the following:

- Additional baseline information and other related knowledge;
- Additional engineering design and further definition of the Project, environmental effects, mitigation measures and management plans;
- Changes to land ownership, including the finalization of additional land purchase and land access agreements; and
- Comments received to date during consultation and engagement activities regarding the Project.

Table 10.1.1 Changes to the Project Since Initially Proposed

Changes to Project	Comment	Benefits to the Environment, Aboriginal Groups and Public
Ore processing plant and related infrastructure has been relocated to the southeast, versus the layout presented in the PD. The indicated footprint of the processing facilities is also reduced.	Smaller processing plant footprint reflects the results of more detailed engineering design through the efforts of an optimization study conducted for Treasury by Lycopodium Minerals Canada Ltd. The location of the processing plant and supporting facilities was moved several hundred meters south and east of the initial proposal to keep the processing plant on lands owned by Treasury and to take advantage of the smaller footprint.	<p>Reduced potential for environmental effects due to the smaller footprint.</p> <p>Reduced potential effects to Crown land.</p> <p>Reduced potential effects to treaty and aboriginal rights of the local Aboriginal populations by placing the processing plant on private versus Crown land.</p>
TSF structure footprint and layout has been modified to reflect the results of more detailed engineering being completed after the original PD was submitted to the Agency. The TSF has now been designed to fit onto land owned primarily by Treasury.	The overall footprint of the TSF is slightly reduced based on more detailed engineering by WSP. The footprint of the TSF was also modified to constrain its boundaries largely to private property owned by Treasury.	<p>Reduced potential effects to Crown land.</p> <p>Reduced potential effects to treaty and Aboriginal rights of the local Aboriginal populations by placing the TSF on private versus Crown land.</p>



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<p>Addition of ditching and associated seepage collection ponds within the mine rock area (WRSAs, OB and low-grade stockpiles).</p>	<p>Further technical information received from Ecometrix has identified that a greater percentage of the waste rock may be PAG. In order to control any long term potential effects of the PAG waste rock, this design change was incorporated into the integrated water management plan and practices (allows for collection, treatment and monitoring).</p>	<p>Reduced potential for environmental effects on water quality.</p> <p>Reduced potential effects to Crown and private lands held by Treasury.</p>
<p>WRSAs layout redefined</p>	<p>The footprint of the WRSAs area was modified, reflecting the results of more detailed engineering work being completed, and constraining the boundaries largely to private property owned by Treasury.</p>	<p>Reduced potential for environmental effects on local receptors (water quality, air quality, noise, and visual aesthetics).</p> <p>Reduced potential effects to Crown land.</p>
<p>OB stockpile layout redefined</p>	<p>The profile and layout was changed to reflect an updated version of the mine plan and the decision to place the overburden on lands Treasury currently owns.</p>	<p>Constraining the overburden stockpile to lands Treasury owns has had the effect of moving it further away from Blackwater Creek, making it simpler to keep any potential runoff away from the creek.</p> <p>This change also provided a different profile than the original design, allowing the stockpile to be both more effective as a noise barrier and have less visual effect.</p>
<p>Modest alterations to the open pit footprint</p>	<p>New pit layout and design reflects increased geological and engineering knowledge of the resource. This is based on subsequent infill and exploration drilling, combined with the development of a more detailed mine plan.</p>	<p>These changes are anticipated to strengthen the case to open a mine which would provide socio-economic benefits to the local public and Aboriginal communities.</p>



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<p>Water management and treatment options further developed resulting from process optimization work completed after the original PD.</p>	<p>An integrated water management system has been designed, reflecting an updated engineering design which incorporated a water recycle loop, reducing freshwater need requirements.</p> <p>Minimize the draw for fresh water intake to support process requirements.</p>	<p>Reduce effluent discharge volumes from the TSF.</p> <p>Addition of water treatment technologies to ensure treated water discharge meets PWQO standards for Ontario.</p> <p>Minimizing fresh water intake reduces the potential for environmental effects related to taking water.</p>
<p>Effluent discharge point and receptor selected – Blackwater Creek</p>	<p>The decision to use Blackwater Creek as the final treated effluent discharge point was the result of an alternatives assessment process. The option selected is the least complicated and disruptive of the options considered. A more in-depth engineering analysis supported this option selection. Additional waste water treatment technologies were introduced to the project to ensure effluent discharge meets Ontario PWQO standards. The details of the treatment regime are embedded within in the EIS.</p>	<p>Reduce potential for environmental effects to Crown and private land and landowners versus other options. This option eliminates effluent pipeline crossings at roadways, rail lines, natural gas pipelines and the trans-Canada highway. The potential for effluent pipeline failure and associated environmental risks and cleanup efforts is also eliminated.</p> <p>Public concern regarding discharge of TSF effluent to Thunder Lake is eliminated (smaller water body than Wabigoon Lake, higher concentration of people living around the lake).</p> <p>Some members of the local public have indicated the preference to avoid direct discharge to Wabigoon Lake. The option selected addresses that concern.</p> <p>The application of additional treatment technologies, specifically an RO plant, will provide further environmental safeguards. This adds another layer of protection for the environment and the public.</p>



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<p>Fresh water make up supply source changed from Thunder Lake to existing irrigation ponds located on the former OMNRF tree nursery site.</p>	<p>Final fresh water intake point selection is the result of an alternatives assessment review with inputs from additional hydrogeology studies, plant process engineering studies and a more detailed mine plan.</p>	<p>Reduce potential for environmental effects related to constructing a water intake in Thunder Lake and running a pipeline over land to the processing plant site.</p> <p>Reduced potential effects to Crown and private lands due to ongoing maintenance and inspection activities associated with the pipeline.</p> <p>Reduced potential effects of fresh water runoff resulting from a pipe failure.</p> <p>Reduced potential effects to treaty and Aboriginal rights of the local Aboriginal populations by placing the fresh water make up system on more private versus Crown land.</p> <p>Some members of the public have also indicated the preference to avoid direct intake from Thunder Lake and Wabigoon Lake. This redesign for fresh water makeup addresses those preferences.</p>
<p>Blackwater Creek watercourse realignment.</p>	<p>Realignment of Blackwater Creek reflects further detailed engineering design work associated with relocating the processing plant to a different location than that outlined in the original PD. The creek realignment accommodates revised location of the processing plant, and associated infrastructure.</p>	<p>Reduce potential for environmental effects.</p> <p>Reduced potential effects to Crown land.</p> <p>Reduced potential effects to treaty and Aboriginal rights of the local Aboriginal populations by placing the processing plant on private versus Crown land.</p>
<p>Optimization of electrical substation location</p>	<p>Routing and location optimized to reflect revised infrastructure location.</p>	<p>No significant additional benefits from this modification relative to the originally proposed electrical system takeoff point.</p>



10.2 BENEFITS TO CANADIANS

Public comments and input regarding the Project have been received through engagement and consultation activities such as public and special interest group meetings. Comments include those reflecting employment, business, and training. The region has experienced significant local regional declines in employment and population. Employment has largely decreased due to downsizing and permanent closures of paper machines and sawmilling capacity in the forestry industry. Appendix CC provides further details on regional declines of employment and localized employment shifts.

The construction and operation of the Project will have a positive effect on the local economy. Employment opportunities arising from the Project may also allow skilled trade workers who left the City of Dryden after downsizing of the Weyerhaeuser/Domtar pulp and paper facilities to find employment at the Project. Job opportunities created at the Project will provide an opportunity for youth to stay in the region, and attract new working age migrants. The overall effect of the Project will be felt most within commuting distance from the site (estimated 100 km). The overall effect of the Project on the Provincial economy is positive as a result of high paying permanent and construction jobs created, purchase of goods and services over the life of the Project, and indirect jobs created in support of the Project. A summary of the potential direct and indirect induced job numbers and total person hours for the Project is provided in Appendix CC.

Treasury has policies for hiring and purchasing locally. Treasury has demonstrated deep commitment to both of these policies as evidenced by the makeup of its local workforce and purchasing record. Treasury purchases a majority of its goods and services locally and within the Province of Ontario (Appendix CC). The effect to both regional and Provincial economics will be continuous during the construction, operation and post closure activities of the Project. The Project is estimated to create an average of approximately \$14.5 million annually in direct labor compensation during the operations phase. This additional annual compensation will provide a positive effect to both regional and provincial economies and will be continuous through the construction and operation phases of the Project. This will continue to a lesser extent during the decommissioning, closure, and post-closure phase.

Training, work experience and additional skills gained through involvement in the Project are expected to result in abilities that are transferrable to other economic sectors including forestry and manufacturing. This will be of value to Treasury and its employees for the life of mine and post-closure. Many of the skills developed while working at Treasury will be transferrable to other mining operations and industries, should people either choose to move or be compelled to move post closure. The skill building associated with the Project will thereby allow the region's economic base to take advantage of other future employment and business opportunities well beyond the life of the Project. There is also the potential that the Project will help encourage other mineral development projects in the region, and potentially set Dryden up as a support service and supply hub for other similar regional exploration and mining projects.