



Wetland reclamation plan Template

*Based on the Wetland reclamation guide for Ruby creek and Indian river
East block placer mine*

Mineral Resources Branch
March 2023





i All maps included in this plan must conform to Mineral Resources Branch digital mapping standards found at Yukon.ca/mineral-resources-branch-digital-mapping-standards.

i This document is based on the Wetland reclamation guide for Ruby creek and Indian river East block placer mine for at Yukon.ca/wetland-reclamation-guide-ruby-creek-and-indian-river-east-blockplacer-mine-2015-0150.

i The Mineral Resources Branch may update the contents in this document to reflect current standards in practice.

1. Introduction

Provide a brief introduction and summary of the project that includes the following.

- Current and previous approvals for the project. Reference any relevant conditions of those approvals (e.g., the condition requiring the wetland reclamation plan, any conditions of your licence specific to wetlands, etc.).
- Description and location of the project area. Include the GPS coordinates of the project extent and claims list.
- Description of the location of First Nations Settlement Lands, if any, that overlap the project area.
- A map of the project area showing existing activities, processes, infrastructure, wetland areas and Settlement Lands.

2. Baseline conditions

Describe baseline conditions (existing, pre-development and prior to the current authorization) within the project area. Include references to maps as well as drone or satellite imagery, photos and shapefiles. Descriptions should include the following.

- Information on existing infrastructure (roads, ditches, power lines, nearby water courses, etc.).
- Size and classes of wetlands, as well as the state of the wetlands as either disturbed or undisturbed. (See The Canadian Wetland Classification System in the appendix.)
- Details on the nature of any wetland disturbance, including the exploration, mining and miner-like activities that create the disturbed areas.
- Details regarding vegetation, soils and permafrost site hydrology.
- Known wildlife occurrences and overlap with key wildlife areas. (See the key area mapping tool in the appendix.)

3. First Nation and stakeholder engagement

Yukon First Nations have strong cultural and traditional connections to the land in their Traditional Territories. Yukon First Nations' relationship with the land is informed by traditional land use, which can include cultural camps, hunting, fishing, etc. Yukon First Nations also have rights associated with the land as set out in their respective Final Agreements.

The Government of Yukon has a duty to consult with First Nations on all impacts to their rights in accordance with their respective Final Agreements. As such, the Government of Yukon strongly encourages all proponents to engage with affected First Nations.

Provide a detailed description of your engagement with affected First Nations. Ensure that you provide the following information to the affected First Nation.

- Timing of planned activities
- Location of areas where mining activities will occur
- Issues and concerns raised by the First Nations
- Changes to the mine plan as a result of your engagement with First Nations

Wetland reclamation plans submitted without engagement with affected First Nations may result in delays during the plan review process. Proponents must also engage with other land users (outfitters, trappers, etc.).

4. Mine plan

Describe your mine plan with attention to overlapping wetlands and any conditions of your licence specific to wetlands. Maps must outline the limits of the project area (i.e., the full extent of the disturbance footprint) and the percentage of each wetland class that will be disturbed and undisturbed.

Based on the map of the project area, provide focused maps that illustrate the planned operations for the duration of the licence. The focused maps must show the following.

- All wetland areas and their classes
- Areas of planned mine operation in wetlands
- Areas of wetlands that you will avoid mining and any buffers
- Areas where impacts to wetlands will be minimized
- Areas where wetlands will be reclaimed in that year
- Project components and infrastructure

5. Potential wetland impacts

Describe the potential effects, both direct and indirect, of the proposed project on wetlands. Demonstrate how you will apply the mitigation hierarchy (i.e., avoidance, minimization of impacts and reclamation). These impacts should note any changes to baseline wetland conditions as reported in section 2. Include details on the following topics.

- **Wetland avoidance** – List the percentage of each wetland class that will remain undisturbed by the project. Include areal extent in the required figures.
- **Wetland impact** – List the percentage of each wetland class that will be disturbed by the project and the nature of the expected disturbance (i.e., changes in flow, water level, etc.).

- **Wetland mitigation** – Describe project changes made both to design and operations in an effort to avoid or reduce wetland impacts. This can include erosion and sediment control methods, alternative infrastructure or access design, etc. Include a real extent in required figures.
- **Guidelines** – Identify applicable guidelines and best management practices (see the Wetland reclamation guide for the Ruby Creek and Indian River East Block Placer Mine [\[2015-0150\]](#) in the appendix) that will be applied throughout the project life cycle. Any additional sources used must be cited throughout the plan.

6. Reclamation

Describe wetland reclamation plans and a timeline for reclamation activities. (See the Wetland reclamation guide for the Ruby Creek and Indian River East Block Placer Mine [\[2015-0150\]](#), table 1, in the appendix.)

- Specify where the pre-existing wetland class will be reclaimed with the same wetland class and with a different wetland class. If wetlands are reclaimed with a different wetland class, explain why.
- Describe what steps you will take to create wetlands. Provide specific details around reclamation practices and methods, and physical description or final configuration of the wetlands that would be created. Include the size, shape, depth and slope of the margins as well as hydrologic connectivity, soil distribution and revegetation efforts, if any.
- Describe the techniques and methods that you will use to meet the planned outcomes in this section.
- Describe any progressive reclamation efforts, including a schedule outlining when all mining and reclamation activities will occur each season.

7. Monitoring and reporting

Describe monitoring efforts that will occur over the duration of the licence. (See the Wetland reclamation guide for the Ruby Creek and Indian River East Block Placer Mine [\[2015-0150\]](#), table 2, in the appendix.) Provide a schedule for reporting and details on what will be contained in the reports. Reference any conditions of your approval that relate to monitoring.

- Describe the specifics of any planned monitoring activities including, but not limited to, the duration of monitoring efforts, water quality, vegetation, site stability and water levels.
- Describe how the project will adapt if any proposed measures fail or do not have the desired outcome.

8. Approval and authority to proceed

The Chief of Placer Land Use must review and approve the wetland reclamation plan before developments start. The Chief may require revisions, updates or additional information at any time.

This plan will form part of the placer mining land use approval. Inspectors at the Compliance, Monitoring and Inspections Branch will undertake routine monitoring and evaluation of wetland reclamation activities as described in this plan.

The Government of Yukon will share information provided in this plan and consult with affected First Nations.

Appendix – Resources

The list of resources provided in this appendix is not intended to be exhaustive. The Government of Yukon encourages all proponents to review the following materials for best management practices, examples and mapping standards tools.

Government of Yukon resources

Explore map data using GeoYukon

- Yukon.ca/geoyukon

Information sheet: placer mining in the Indian River area

- Yukon.ca/information-sheet-placer-mining-indian-river-area

Key wildlife area mapping tool

- Yukon.ca/science-and-natural-resources/fish-and-wildlife-species/find-wildlife-key-area-gis-datasets

Mineral Resources Branch digital mapping standards

- Yukon.ca/mineral-resources-branch-digital-mapping-standards

View a map of the Indian River wetlands

- Yukon.ca/en/science-and-natural-resources/mining/view-map-indian-river-wetlands

Wetland reclamation guide for the Ruby Creek and Indian River East Block Placer Mine (2015-0150)

- Yukon.ca/wetland-reclamation-guide-ruby-creek-and-indian-river-east-blockplacer-mine-2015-0150

Third-party resources

Canadian Wetland Classification System

- <http://www.wetlandpolicy.ca/canadian-wetland-classification-system>

KPMA wetland classification handbook

- https://www.kpma.ca/wp-content/uploads/2022/05/KPMA_Wetland-Classification-Guide_screen-version-April-2022.pdfh