STEWART RIVER WATERSHED

AUTHORIZATION FOR WORKS OR UNDERTAKINGS AFFECTING FISH HABITAT FOR SPECIFIED STREAMS IN THE YUKON TERRITORY

Pursuant to Section 35(2) of the Federal *Fisheries Act*;

The Minister of Fisheries and Oceans Canada (the "Minister") hereby rescinds the conditions of the Stewart River Watershed Authorization (08-HPAC-PA5-00044, April 11, 2008) pertaining to placer mining works or undertakings and sediment discharge standards in the Stewart River watershed.

The Minister hereby authorizes the "*harmful alteration, disruption or destruction of fish habitat*" resulting from placer mining works or undertakings and discharge of sediment at concentrations specified in this authorization, uncontaminated by deleterious substances, within certain streams or portions of streams in the Stewart River watershed as identified on the ***Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed*** (Schedule 1).

Authorization issued to:

Individuals or companies conducting placer mining in certain streams or portion of streams within the Stewart River watershed, Yukon Territory that hold a valid Water Use License pursuant to the *Waters Act* (Yukon) for placer mining activities.

Location of Project

The works and undertakings are located within the drainage basin of the Stewart River watershed, in the Yukon Territory. This authorization applies to certain streams or portions of streams classified on the ***Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed*** (Schedule 1). Larger-scale maps may be available from the Yukon Placer Secretariat or Fisheries and Oceans Canada.

Valid Authorization Period

The valid authorization period for the harmful alteration, disruption and destruction of fish habitat resulting from placer mining works or undertakings is from November 1, 2010 until such time as this authorization is revoked, rescinded, amended or replaced by the Minister.

Amendments or revisions to the terms and conditions identified in this authorization may be required if placer mining activities result in an unforeseen risk to fish or fish habitat resources as demonstrated through monitoring of management parameters (water quality, aquatic health, and physical habitat compensation or rehabilitation). An annual and 5-year review will be conducted to review results of monitoring activities and should amendments be recommended, the process will be guided by the ***Adaptive Management Framework for Yukon Placer Mining***, available from the Yukon Placer Secretariat or Fisheries and Oceans Canada.

Description of Works or Undertakings

This authorization permits the harmful alteration, disruption or destruction of fish habitat, in certain streams or portions of streams in the Stewart River watershed resulting from placer mining works or undertakings: Those undertakings covered by this authorization are limited to:

- The construction of diversion channels,
- In-stream works,
- Water acquisition, and;
- Discharge of sediment from settling facilities.

Works or undertakings are completed in accordance with methods identified in the ***Fish Habitat Design, Operation and Reclamation Workbook*** available from the Yukon Placer Secretariat and Fisheries and Oceans Canada.

Conditions of Authorization

1. The general watershed conditions of this authorization notwithstanding, should any specific works, undertakings, or activities authorized by this authorization, due to weather conditions, different soil, local topography, updated fisheries information or other natural conditions, appear in the opinion of the Fisheries and Oceans Canada, likely to cause greater adverse environmental effect than was contemplated by this watershed authorization, then Fisheries and Oceans Canada may direct the specific Placer Mining operation to suspend or alter works and activities to avoid or mitigate adverse effects with respect to fisheries resources. In circumstances where DFO holds the view that greater adverse environmental effects will occur at a specific site than were contemplated by this watershed authorization Fisheries and Oceans Canada may also modify the application of this authorization to that specific site. Should Fisheries and Oceans Canada propose such modification Fisheries and Oceans Canada will give the Placer Mining operation the opportunity to discuss and respond to the proposed modification.

2. All works or undertakings will be conducted in accordance with:

   2.1. The measures identified in the ***Fish Habitat Design, Operation and Reclamation Workbook*** as per the fish habitat suitability classification of streams or portions of streams identified on the ***Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed*** (Schedule 1).

   2.2. Discharge standards for placer mine effluent identified in the ***Sediment Discharge Standards for Placer Mine Effluent – Stewart River Watershed*** (Schedule 2).

      2.2.1. Sediment discharge standards will be phased in as identified in Schedule 2.

3. Prior to proceeding with placer mining works or undertakings that are likely to result in the harmful alteration, disruption or destruction of fish habitat, the proponent will complete the applicable ***Fish Habitat Design, Operation and Reclamation Worksheets*** (all required appendices

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of the ***Fish Habitat Design, Operation and Reclamation Workbook***) and include these worksheets as a component of their submission for project review to the Yukon Environmental and Socio-economic Assessment Board and the Yukon Water Board.

4. Fish habitat reclamation measures will be identified in the ***Fish Habitat Design, Operation and Reclamation Worksheets*** in accordance with the measures identified in ***Fish Habitat Design, Operation and Reclamation Workbook***. These worksheets are to be included in the submission for project review to the Yukon Environmental and Socio-economic Assessment Board and the Yukon Water Board.

5. The proponent must ensure that all plans developed pursuant to this authorization have been duly prepared and acknowledges sole responsibility for all design, safety and workmanship aspects of all the works associated with this authorization.

6. In the event that any of the forgoing conditions cannot be met, the provisions of this authorization do not apply and the proponent will apply to Fisheries and Oceans Canada for review prior to proceeding.

The holder of this authorization is hereby authorized under the authority of section 35(2) of the Federal *Fisheries Act*. R.S.C., 1985, c.F. 14, to carry out the work or undertaking described herein. This authorization is valid only with respect to fish habitat and for no other purposes. It does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies. Failure to comply with any condition of this authorization may result in charges being laid under the Federal *Fisheries Act*.

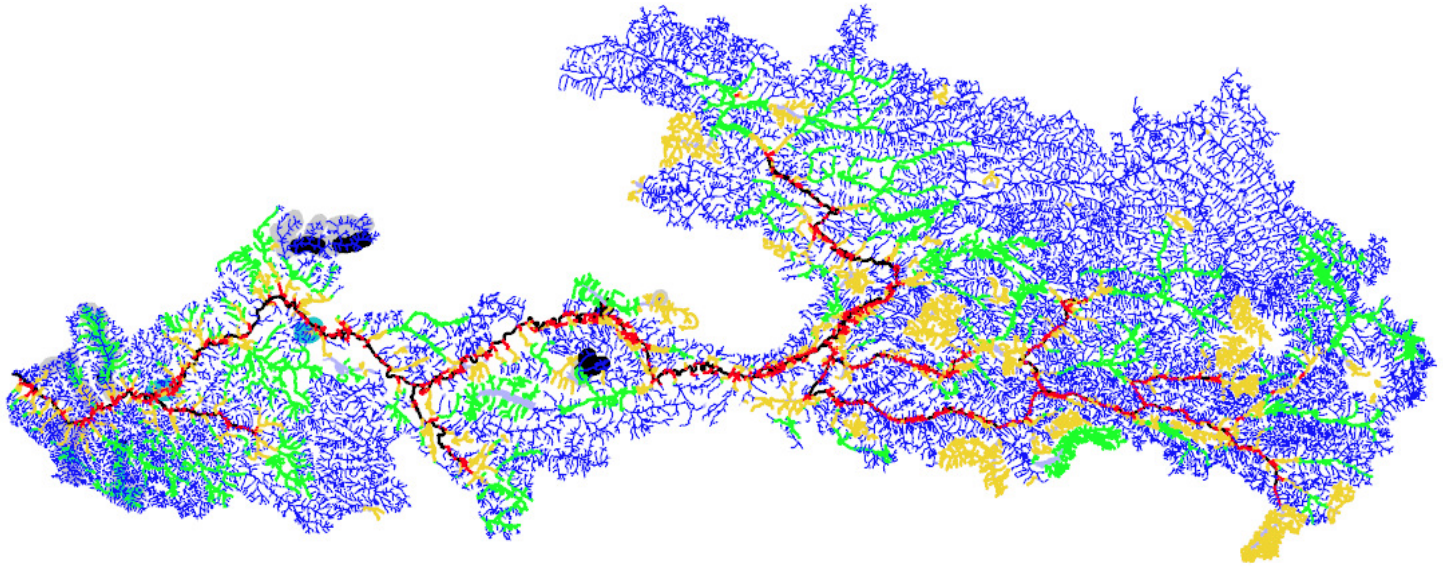
Authorization #: 08-HPAC-PA5-00044-2

Date of Issuance: November 1, 2010

Approved by: Briar Young

Title: Manager, Oceans Habitat and Enhancement Branch
Yukon / Transboundary Rivers Area
Fisheries and Oceans Canada

Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed (Category A)



Watercourse Classification, Habitat Suitability Types

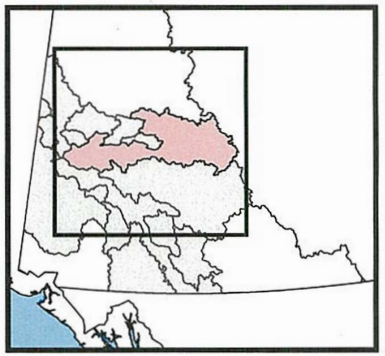
- Water Quality
- Low Suitability
- Moderate-Low Suitability
- Moderate-Moderate Suitability
- Moderate-High Suitability
- High Suitability
- Areas of Special Consideration - Ecological
- Areas of Special Consideration - Cultural

Development

- Current
- Historical
- Extensive

Lakes

The Stewart River is classified as High Suitability unless otherwise shown.



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0 20 40 60 80 100 km

Map Compiled: July 2026

Fisheries and Oceans Canada | Pêches et Océans Canada

Sediment Discharge Standards for Placer Mine Effluent – Stewart River Watershed (Category A)

Habitat Suitability	Water Quality Objective[1]	Sediment Discharge Standard for Mine Discharge
High	**<25 mg/L[1]**	**Compliance Level: <0 mg/L**
Moderate-High	**<25 mg/L[1]**	**Compliance Level: <200 mg/L**
Moderate-Moderate	**<50 mg/L[1]**	**Compliance Level: <200 mg/L**
Moderate Moderate (Tributary to Small Lakes)	**<50 mg/L[1]**	**Compliance Level: <200 mg/L**
Moderate-Low	**<80 mg/L[1]**	**Design Target: 0.2 ml/L** **Action Level: 0.8 ml/L** **Compliance Level: 1.2 ml/L**
Moderate Low (Tributary to Large Lakes)	**<80 mg/L[1]**	**Design Target: 0.2 ml/L** **Action Level: 0.8 ml/L** **Compliance Level: 1.2 ml/L**
Low	**<200 mg/L[1]**	**Design Target: 0.2 ml/L** **Action Level: 1.0 ml/L** **Compliance Level: 1.5 ml/L**
Water Quality Zones	**Downstream WQO mg/L[1]**	**None identified to date. Consult Fisheries and Oceans Canada for guidance where you believe a natural barrier to fish exists**
Areas of Special Consideration		**To be determined by Fisheries and Oceans Canada if locations are identified other than those listed below**
Stewart River (main stem from Valley Creek to Rosebute Creek)	**<25 mg/L[1]**	**Compliance Level: <0 mg/L**
Diversion Creek	**<25 mg/L[1]**	**Compliance Level: <200 mg/L**
Stewart River (main stem at McQuesten River)	**<25 mg/L[1]**	**Compliance Level: <200 mg/L**

[1] The water quality objective is established for management and effectiveness monitoring purposes. The placer mine operator is not required to monitor or report on this objective for compliance purposes.

General Notes Regarding Sediment Discharge Standards

- The point at which the above-listed Sediment Discharge Standards for Mine discharge will be measured will be a point in the effluent flow immediately before it enters the natural stream flow.
- Sediment Discharge Standards for Mine discharge include all releases of effluent (both point and non-point sources) into the natural stream flow of a watercourse.
- All effluent discharge levels are identified in excess of natural background concentrations at the time of sampling.
- When the sediment discharge standard is a settleable solids standard (ml/l), measurement will either involve laboratory analysis, or utilizing an Imhoff cone.
- When the sediment discharge standard is a suspended solids standard (mg/l), measurement will either involve laboratory analysis, or utilizing a portable digital turbidity/suspended solids correlation meter.
- Samples collected for the purpose of determining compliance with the above-listed Sediment Discharge Standards for Mine discharge will be analysed via laboratory analysis.