



**Fish Habitat Management System
for Yukon Placer Mining**

Adaptive Management Report (2010)

Prepared by

The Yukon Placer Secretariat

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The Fish Habitat Management System for Yukon Placer Mining was implemented in April 2008, and has replaced the Yukon Placer Authorization (YPA) in 16 watersheds in the Yukon River basin. Authorizations for the Liard and Alsek River basins are under development. Founded on principles of adaptive management and incorporating a risk-based approach to decision-making, the system is intended to balance the objectives of a sustainable Yukon placer industry with the conservation and protection of fish and fish habitat supporting fisheries.

Adaptive management recognizes that the effectiveness of any management system is hampered by a degree of uncertainty and lack of knowledge. It seeks to improve the system by monitoring the effects of management actions, in order to learn from the results. The Adaptive Management Framework for Yukon placer mining is complemented by traditional knowledge and water quality objectives monitoring, aquatic health monitoring and economic health monitoring programs. The results provide new information and a rational basis for making any adjustments required to achieve the two management objectives.

The Adaptive Management Framework (November 2008) describes how information generated from the three monitoring programs and traditional knowledge will be reviewed and considered. It also guides the development of recommendations for changes that may be required to ensure the objectives of the fish habitat management system are achieved.

Adaptive Management recommendations are made by the Yukon Placer Secretariat's Inter-governmental Management Group (IMG). Typically, the IMG consists of representatives from Fisheries and Oceans Canada (DFO), The Yukon Departments of Environment and Energy, Mines and Resources, and the Council of Yukon First Nations. Individual First Nation governments are invited to participate on the IMG when the adaptive management framework is applied to watersheds in their traditional territory.

It should be noted that water use licenses issued after April 11, 2008 conform to the sediment discharge standards and site management practices required under the new habitat management system. Additionally, in 2009 all licensed placer miners were oriented to the applicable design target and action level, and were required to comply with a sediment discharge standard of no greater than 2.5 ml/L, or the standard stipulated in their existing water use licence, whichever is more stringent. In 2010 the phase-in period for stricter sediment discharge standards ended, and operators were required to comply with the standard described in Schedule 2 of the watershed-based authorization that applies to their site.

Changes to the Adaptive Management Process

The adaptive management process was designed so that data collection and analysis, reporting and decision-making were completed on an annual basis. Following three years of monitoring it became apparent that this strict timeframe does not allow the analysts to consider key information derived from other sources (Water Survey Canada, for instance, can not

provide data that has been subjected to Quality Assurance/Quality Control procedures until months after a draft Water Quality Objectives monitoring report is required).

In response to this challenge the IMG agreed to the following change: data collected in the open water season will be analyzed immediately and draft reports are still due before the end of December, but the Adaptive Management meeting held to discuss the results and make recommendations will not be held until late fall in the following calendar year. This will allow the draft reports to be revised on the basis of third party sources of information that is generally available months after the reports are first drafted.

To ensure that data collection, analysis and reporting continues in a reliable and timely manner, the Yukon Placer Secretariat has developed a Guidelines and Procedures document that describes strict timelines for all phases of the adaptive management process. As a result of this change the Adaptive Management meeting scheduled for February 2012 will consider the results of monitoring that occurred in the 2010 open water season, and the results from sampling that occurred in 2011 will be reviewed in the fall of 2012.

Reclassification of Lynx Creek

Environment Yukon and the First Nation of Na-Cho Ny'ak Dun provided written requests to reclassify Lynx Creek (McQuesten River watershed) as an Area of Special Consideration. In summary, both parties consider Lynx Creek to be critical habitat for Arctic grayling that supports a traditional fishery and is important for "allowing the continuation of culture through hands on –out on the land– education and teachings." The Yukon Placer Secretariat distributed the requests to all parties, and received comments from the Klondike Placer Miners' Association. All three documents are appended to this report.

Areas of Special Consideration are defined as "watercourses that contain ecologically or culturally important fisheries or aquatic resources or provide significant, critical linkages to upstream habitats for fish." Reaches assigned this designation may include habitats for rare or locally significant species and/or areas which directly support subsistence, traditional, commercial or sport fisheries.

The IMG carefully considered the available information and unanimously recommended that Lynx Creek be classified as an Area of Special Consideration. The Joint Placer Implementation Committee (JPIC) endorsed the change when it met on September 6, 2011.

Reclassification of Donahue Creek

Donahue Creek is a right limit tributary of the Yukon River that the Yukon Habitat Suitability Model described as low suitability habitat from the mouth to headwaters. It was recently noted that the Yukon Placer Committee classified the lower reaches of this watercourse as a Type II stream, based upon a physical site assessment conducted in July 2003. The IMG has concluded that the results of the physical habitat assessment should supersede the modeled outcome. As a consequence, the first 500 metres of Donahue Creek will be reclassified as habitat of Moderate-high suitability.

Adaptive Management Meeting (November 17, 2011)

On November 17, 2011, a meeting was held to discuss the results of the monitoring conducted in 2010. The IMG was augmented by representatives from the First Nation of Na-cho Nyak Dun and Tr'ondëk Hwëch'in government.

The meeting commenced with a brief overview of the Fish Habitat Management System for Yukon Placer Mining, and a review of the Adaptive Management Framework and its guiding principles. This was followed by a presentation of the results of the water quality objectives monitoring, aquatic health monitoring and economic health monitoring programs (no additional traditional knowledge was shared for consideration under the Adaptive Management Framework in 2010). A question and answer period followed each presentation, and questions pertaining to the sampling and analytical methods were answered by the technical staff supporting the IMG.

The meeting participants did not provide any comments or suggestions. This draft Adaptive Management Report has been distributed for review by all parties, and written comments will be accepted until January 30, 2013. The IMG will give full and fair consideration to all submissions, after which the Yukon Placer Secretariat will publish the final report.

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