



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

Adaptive Management Report (2011)

Prepared by

The Yukon Placer Secretariat

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The Fish Habitat Management System for Yukon Placer Mining replaced the Yukon Placer Authorization (YPA) in 15 Yukon watersheds on April 11, 2008 and in one Yukon watershed on November 1, 2010. 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 should 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 was 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, cannot provide data that has been subject 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 the 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 held on November 22, 2012 considered the results for monitoring that occurred in the 2011 open water season, and the results from sampling that occurred in 2012 will be reviewed in the fall of 2013.

Adaptive Management Meeting (November 21, 2012)

On November 21, 2012 a meeting was held to discuss the results of the monitoring conducted in 2011. The IMG was augmented by representatives from the White River First Nation, Kluane First Nation, Tr'ondëk Hwëch'in government and the First Nation of Na-cho Nyak Dun.

The meeting commenced with a brief introduction and some housekeeping items. 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 2011). 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 following recommendations or comments were made by meeting participants:

- Kluane First Nation asked if there are plans to re-test stressed sites in the White River watershed (i.e. Burwash Creek).
- Kluane First Nation would appreciate advance notice when sampling is planned for its Traditional Territory.
- It was recommended that First Nation offices be contacted to see if anyone is available to help with the monitoring efforts.
- It was suggested that weather stations be set up at sites where Aquatic Health monitoring is planned in order to gather more weather information for the reports. If stations are to be deployed it will be imperative to decide on the monitoring sites early in the spring.
- There was a suggestion that the aquatic health monitoring report include another column to explain any anomalies related to a sampling site.
- Tr'ondëk Hwëch'in asked about the stressed sites in part of its traditional territory (e.g. Black Hills, Gold Run Creek and Barker Creek).

- It was recommended that subsequent adaptive management meetings begin with a briefing on environmental conditions that might have influenced the results of monitoring.

The meeting participants did not provide any further comments or suggestions in writing. The draft Adaptive Management Report (2011) was distributed for review by all parties, and written comments are accepted until April 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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