

Fish Habitat Management System for Yukon Placer Mining

Adaptive Management Report (2012)

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 16 Yukon watersheds. 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 Intergovernmental 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 will be 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 Guideline 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 December 10, 2013 will consider the results for monitoring that occurred in the 2012 open water season, and the results from sampling that occurred in 2013 will be reviewed in the fall of 2014.