CMC Agenda April 14, 2010

(9:00) Review: Actions from March (Ken Vanderburgh/Mike Pedersen)

- NRAC comments to Ken
- eWild – MOE to identify subset of databases of most relevance
  – Mike Gash to talk to Trish Balcaen
  - Goal 2 deletions (John Youds)
- FTEs added to business plan

Not Responsive

(2:00) Horsefly River Placer and Wilderness Reserve Update (Tracy Martin)

Not Responsive

ISSUE: Maintaining a No Registration Reserve for placer titles over the Horsefly River watershed.

BACKGROUND:

- The Horsefly River is one of the most significant fish producing streams in the province even though it is also an inherently temperature sensitive stream.
- The Horsefly watershed is recognized under the Cariboo Chilcotin Land Use Plan as an important watershed with hydrological sensitivity. It is being considered for designation as a fisheries sensitive watershed as it hosts both significant fisheries values and watershed sensitivity.
- In 1988, the Ministry of Environment requested a No Staking Reserve (now called a No Registration Reserve) be established over the Horsefly River watershed (Wilderness Reserve Site #329600, area of 135,129 ha) due to the significance of this watershed for salmonid fish production.
- The reserve was established (see attached map) in 1988 and prohibited the acquisition of placer titles but continued to allow acquisition of mineral titles. The reserve was reviewed in 1994 and renewed.
- In March 2010, MEMPR Mineral Titles Branch proposed to remove the No Registration Reserve and replace it with a reserve for minerals and placer over the length of the river, extending only 15 metres beyond each bank of the river, and not applicable to any tributary streams.

DISCUSSION:

- The Ministry of Environment has significant concerns with the current proposal to remove the No Registration Reserve because of the significant fisheries values and the impacts that placer mining is likely to pose to the values.
- The Horsefly River was one of British Columbia's first Classified Waters, offering provincially unique angling opportunities. The river is tributary to Quesnel Lake, and is used for spawning and sub-adult rearing by a biologically unique wild race of trophy-sized rainbow trout.
- The Horsefly River delivers approximately 75% of the total rainbow trout production to Quesnel Lake, a sport fishery highly dependent upon the maintenance of this population.
- The Horsefly River watershed offers some of the most suitable salmonid habitat in the mid-Fraser River drainage. Chinook, coho and a prolific race of sockeye salmon use the main stem Horsefly River and tributaries for spawning, rearing, and overwintering. The dominant Horsefly sockeye run comprised over 50% of Fraser River sockeye production in 1993, yielding a catch worth over 68 million dollars.
- Throughout the summer and fall, and owing to the large number of lakes in the drainage, warm surface waters drain to the fish bearing reaches of the Horsefly subjecting fish populations to temperature induced stress and mortality. The Ministry of Environment undertook work to determine thermal processes including heat sources and critical cooling areas throughout the 1990's.
- Salmonids utilizing the Horsefly are cold water fish with a narrow range of temperature tolerance during all aspects of their life history. Salmonid production declines when summer water temperatures exceed 17°C. Total mortality of salmonids occurs if

temperatures exceed 25°C for a few days. In parts of the Horsefly River drainage maximum summer water temperatures exceeding 23°C are not uncommon.

- Ground water studies in temperature sensitive streams have revealed the importance of stable groundwater influences on fish production and survival by:
    - Providing stable base flows which maintains free flowing water and migratory channels through winter minimal flows. Groundwater influences are critical for juvenile salmonid winter survival. The amount and quality of winter refugia, juvenile mortality and winter carrying capacity are influenced by groundwater flows.
    - Maintaining cool water refugia through dry periods in summer and fall. Salmonids seek refuge in these areas as main stem water temperatures increase. These groundwater sources provide protection from temperature stress and influences carrying capacity during summer weather.
- Placer mining focuses on excavation of old alluvial gravel deposits which provide pathways to the mainstem of the river for alluvial aquifers and groundwater sources. Groundwater regimes in such areas are invariably part of the river's hydrologic regime. Disruption through excavations or other disturbance may disrupt groundwater flow and or increase sedimentation, resulting in a direct negative impact to critical fish resources and their habitat.
- In a watershed as valuable as the Horsefly, placer excavations represent high risk activities that present hazards to salmon and trout production.
- The proposed buffer (15 metres from the bank of the main stem river) does not consider that the flood plain may extend well beyond these buffers and would be inadequate to protect fish and a variety of other riparian values. Given the fish values present, sensitivity of the system and nature of placer mining activities, MOE has significant concerns about the effectiveness of any type of buffer to mitigate against the impacts of placer mining.
- Any staking reserve must protect the integrity of all tributary streams and their hydrology, whether fish bearing or not due to the influence of these streams on the aquatic environment of the Horsefly River main stem. Many of the tributary streams are also natal habitat for juvenile salmonids at key periods during the annual hydrologic cycle of the Horsefly River drainage.

MOE RECOMMENDATION:

The Ministry should request a renewal of the Wilderness/No Staking Reserve on the Horsefly River for a period of a minimum of 30 years in order to help protect the high value fish resources in this watershed.