RESEARCH SEMINAR SERIES

Results of Riparian Management Effectiveness Evaluations in BC

Post-Harvest Assessments of Riparian, Stream, & Fish Habitat Conditions

FREP
Forest&Range
EvaluationProgram

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Abstract: From 2005 to 2008, B.C. Forest Service field staff assessed stream and riparian conditions of 1441 stream reaches in or adjacent to randomly selected cutblocks that had been logged between 1996 and 2006. The objective of these assessments was to determine whether forest and range practices including riparian management standards had been effective in maintaining the "health" or "properly functioning condition" (PFC) of streams and the adjacent riparian areas. Depending on channel morphology, substrate conditions, and fish use, sites were assessed by scoring 15 primary indicators from 114–120 measurements, observations, and estimates based on 38–60 specific indicators. Across the province, 87% of the 1441 assessed stream reaches were in one of the three categories of properly functioning condition. Thirteen percent were deemed not properly functioning (NPF). Most NPF streams (72%) were small, non-fish-bearing class S6 of headwater areas followed by the smallest fish-bearing stream class (S4; 16%). Most NPF sites occurred where riparian tree retention was low. Main sources of impact were sediment generation and delivery from roads (68%), low levels of riparian tree retention (48%), windthrow (32%), cross-stream harvest activity (30%), and machine disturbance in the RMA (26%). Levels of tree retention were substantially higher than required by regulation for all classes of stream, including small tributaries where no riparian reserves are mandatory. Nearly 80% of small fish-bearing streams and 56% of their non-fish bearing tributaries received no-harvest buffers that were respectively 17 and 11 m wide on average. Based on these FREP results, recommendations for minimum levels of riparian retention for small streams were made in the 2010 Chief Forester's FREP Report.

Bio: Peter Tschaplinski has been a research scientist with the province of British Columbia for more than 19 years. He has recently moved to the Aquatic Ecosystems Science Section of the Ministry of Environment from the former Research Branch of the BC Forest Service. Peter specializes in aquatic ecology, fish biology, and fisheries-forestry interactions. His research interests include the effects of forest practices on watershed processes, freshwater habitats, and fish.

When: Tuesday, July 19, 2011. 1:30 pm to 2:30 pm

Location: Victoria: Room 502, 727 Fisgard Street **Conference call: 1-877-353-9184 Conference ID: 7190434**

Common meeting rooms have been reserved in the following locations:

Kamloops: Juniper room, Southern Interior Regional Office
Prince George: Heritage Room, Northern Interior Regional Office, 1011 4th Ave.
Smithers: Driftwood Room, Skeena-Stikine Forest District Office
Nanaimo: Birch Room at 2100 Labieux Rd.
Williams Lake: Williams Lake Room, Williams Lake Forestry Centre

PowerPoint presentation will be available at http://www.for.gov.bc.ca/hre/research_seminars on the day of the presentation.
For further information, please contact Ken Soneff at: Ken.Soneff@gov.bc.ca or 250-828-4164.