

4.4 Watershed Integrity Indicator 3. Watershed Restoration

4.4.1 Background:

The MOF regulates licensee harvest, road building and range activities with the intent of preventing environmental damage to natural resources including fish habitat. The MOF's Compliance and Enforcement section ensures adherence to these standards, and compliance statistics since Forest Practices Code establishment are exemplary in Bulkley TSA. However, there is a legacy of pre-Code activity that was not to the same standard, and the integrity of sensitive watersheds can be compromised by future development. Hence the rationale for "watershed restoration".

The intent of the Forest Renewal BC (FRBC)-funded Watershed Restoration Program (known more recently as the "Enhancing Environmental Values" program) was to restore and protect fish habitat and domestic water supply in priority watersheds through upslope, in-stream or riparian work activities. It was also intended for completed watersheds to be monitored on an ongoing basis to assess treatment efficacy. The EEV program ended in 2001 when FRBC was discontinued and monitoring is incomplete, although it may continue in future under alternative funding sources.

Priority watersheds for restoration were selected based on a combination of factors:

- Presence of fish populations of provincial or regional significance, or at high risk of extinction.
- Value for domestic water use (i.e. Community Watersheds, or watersheds with licensed water users).
- The probability that negative effects on aquatic habitat will occur from past and future harvesting.
- The probability that works will successfully remedy problems with aquatic habitat.
- The extent of previous restoration investment

Because FRBC funding was finite, only Bulkley's "key priority" watersheds received funding for WRP works in latter years of the program. "Key priority" watersheds are within the top 20% of most highly sensitive watersheds in the WLAP Skeena Region based on the factors listed, as assessed by a regional stakeholder panel comprised of government agency and licensee representatives. In latter years, funding was also directed at a District-wide assessment of culverts at fish stream crossings, and replacement of those impassable to fish.

4.4.2 Measure:

Progress towards completion of restoration activities in key priority watersheds

4.4.3 Results and Discussion:

Figure 20 shows progress towards completion of watershed restoration activities in key priority and other watersheds. The progression of activities towards full completion includes:

- Completion of Level 1 Interior Watershed Assessment Procedures (IWAPs). IWAPs describe the basic geophysical characteristics of the watershed and the extent and

location of harvesting activities in the watershed. It derives values for the following indicators of watershed integrity

- Peak flow index
- Road density (in upper 60% of watershed; on erodible soils; on unstable or potentially unstable terrain less than 100 m from a stream)
- Stream crossing density
- Portion of streams (fish bearing and non-fishbearing) that have been logged to the streambank
- Preparation of prescriptions for conducting restoration works
- Completion of works
- Effectiveness monitoring

There is an overlap of information provided by the Level 1 IWAP and Overview Watershed Assessments. However, the two types of assessments are not interchangeable because Level 1 IWAPs predate most overview watershed assessments and provide detail to assist in directing specific watershed restoration projects.

In summary, Figure 20 indicates that Level 1 IWAP's were completed for 20 of the 23 watersheds identified as "key priority". Subsequent prescriptions and upslope works were completed for 13 of the 20 key priority watersheds with completed IWAP's. Subsequent effectiveness monitoring is complete for 4 key priority watersheds. The figure also indicates which other "non-key priority" watersheds have had restoration activity.

Figure 20

Status of Watershed Restoration Activities

