

- Late 1970's Ministry of Environment biologists realize that mule deer winter range (MDWR) values are being lost through timber harvesting that does not consider mule deer requirements.
- 1980 Research conducted by the B.C. Forest Service starts within the region to address what mule deer need in the winter and how forest management can meet those needs.
- 1983 Pilot block of experimental logging using low-volume selection system on MDWR is conducted on the Knife Creek winter range in the Williams Lake District.
- 1984 First replicated experimental low-volume selection system on MDWR is conducted on the Knife Creek winter range.
- 1985 Replicated research on low-volume selection system is conducted on the Big Lake South MDWR in the 100 Mile Forest District.
- 1986 Land Management Handbook 13, the Mule Deer Handbook, is released.
- 1986 Juvenile spacing trials are initiated on MDWR in the 100 Mile Forest District.
- 1987 Mule Deer pamphlet, *A Guide for Loggers*, is released
- 1987 University of British Columbia/Alex Fraser Research Forest is created, including two winter ranges. Ongoing operational testing of mule deer habitat management is initiated.
- Late 1980's MDWR boundaries are revised by the Ministry of Environment, substantially reducing and early 1990's the area (reduced by ~ 42 000 ha) in managed winter range (13 MDWRs are completely removed).
- Late 1980s Revised MDWR boundaries are used for Timber Supply Review (TSR 1).
- 1988–1998 Numerous articles are published in journals, government publications, and conference proceedings to document research results on MDWR.
- 1990 “Clumpy spacing” is developed and a trial established on the Knife Creek MDWR.
- 1994–1995 *Cariboo Chilcotin Land-Use Plan (CCLUP)* and supporting documents are released identifying MDWR as an important management objective and specifying the MDWRs to be managed.
- 1996 MDWR Strategy as mandated by the CCLUP is released by MDWR Committee, documenting status of the approximate 100 MDWRs in the region.
- 1998 *CCLUP Integration Report* is released, providing short- and long-term direction on mule deer management.
- 1998 Stand structure mapping of MDWRs begins.
- 1999 First MDWR management plan is released as a draft template.
- 2000 “Grassland Benchmark” from the *Grassland Strategy* is incorporated into spatial long-term

objectives for MDWR.

- 2000 Extensive review of draft MDWR plan template by Cariboo Lumber Manufacturers' Association is completed.
- 2000 Revisions are made to MDWR plan template, including but not limited to:
- non-productive land mapped and out of long-term objectives; and
  - OGMAs to overlap "high" habitat and "topographic buffers" as much as possible.
- 2000 Extension Note #25A, *Structural Definitions of MDWR Habitat in the IDF Zone*, is released.
- 2000 Interim guidelines are provided for MDWRs prior to plan completion, including specific direction by snowpack zones:
- 1) shallow and moderate snowpack zones
  - 2) transition snowpack zone
  - 3) deep and very deep snowpack zones
- 2001 The Cariboo Mid Coast Inter-Agency Management Committee (IAMC) endorses the *Williams Lake-Chimney Mule Deer Winter Range Management Plan* as the template for completion of the remaining winter range plans.
- 2001 Web site is created to easily access status of MDWR planning.
- 2001 Greatly simplified planning approach is developed and presented to IAMC and Cariboo Lumber Manufacturers' Association (CLMA), including four components:
- 1) *Management Plan for Shallow and Moderate Snowpack Zones*;
  - 2) *Management Plan for Transition and Deep Snowpack Zones*;
  - 3) *Long-term Objectives Map for Individual Winter Ranges*; and
  - 4) *Transition-period Harvest Opportunity Plans for Individual Winter Ranges*.
- 2001-2004 Boundary adjustments are completed for MDWR in the 100 Mile, Williams Lake, and Quesnel Timber Supply Areas (TSAs). This substantially reduced the area to be managed as MDWR, including:
- four MDWRs removed completely;
  - 80 144 ha net reduction in area of MDWR; and
  - 8918 ha net reduction in Douglas-fir area of MDWR.
- 2002 *Management Plan for Mule Deer Winter Ranges in the Shallow and Moderate Snowpack Zones* is completed, incorporating the following changes, including:
- increasing maximum area in skid trails to 10%;
  - increasing non-target harvest of Douglas-fir to 15% and 5% for small and large trees, respectively; and
  - increasing the availability of harvest opportunities.
- 2002 Stand structure mapping is completed for 34 winter ranges.
- 2004 Boundaries for mule deer ungulate winter range are legalized under *Government Action Regulation* for purposes of planning using the *Forest and Range Practices Act*.
- 2005 *Management Plan for Mule Deer Winter Ranges in the Transition and Deep Snowpack Zones* is completed.