



**BCTS**  
BC Timber Sales



SUSTAINABLE FORESTRY INITIATIVE

BC Timber Sales Okanagan - Columbia

## ROADS – WATER MANAGEMENT GUIDELINES

*In the event of any discrepancy between these guidelines, contractual, legal, and/or regulatory requirements related to forest practices or safety, the contractual, legal or regulatory requirements shall prevail.*

*This document provides guidelines for best management practices for BCTS Licensees, Permittees, and Contractors to consider for water management during road-related operations including (but not limited to): road building, maintenance, seasonal deactivation, permanent deactivation, and active road use.*

*This document is a supplement to EFP 04: Roads, Bridges and Major Culverts.*

### GENERAL REQUIREMENTS

Roads held by LPC Road Permit or Road-Use Permit are subject to legislation and regulations governing their construction, maintenance, and use. These requirements remain in effect until the RP or RUP is relinquished. The Forest Planning and Practices Regulation includes:

**FPPR section 39** natural surface drainage patterns requirement:

- ✓ A person who constructs a road must maintain natural surface drainage patterns on the area during and after construction

**FPPR section 72** structural safety requirement:

- ✓ A person who constructs or maintains a road must ensure the road and drainage structures associated with it are structurally sound and safe

**FPPR section 79(6)** road maintenance requirements:

- ✓ Ensuring structural integrity of the road prism and clearing width
  - ✓ Ensuring drainage systems of the road are functional
  - ✓ Ensuring the road can be safely used by industrial users

**FPPR section 82-83** road deactivation requirements:

- ✓ Ensuring the road prism is stable
- ✓ Ensuring there is no likelihood of residual adverse material effects
  - ✓ Ensuring barricades and hazard warning signs are in place

The involvement of a **Qualified Professional** is required for the following activities:

- ✓ Creating or amending a Road Plan (Rehabilitation, Construction, Maintenance, Deactivation)
  - ✓ Carrying out road inspections for adherence to plans
  - ✓ Signing off on confirmation that the plan has been adhered to

### DURING CONSTRUCTION / RECONSTRUCTION

- ✓ Follow your plan
- ✓ Use adequate ditch depth, width, and materials
- ✓ Install drainage structures with adequate bedding, ditch blocks, sumps, and armouring
- ✓ Scale back overhanging cutslope material (source of sedimentation and/or ditch blockages)
- ✓ Install cross drain culverts as prescribed and additional culverts if subsurface flow is encountered

### DURING ACTIVE OPERATIONS

- ✓ Regularly inspect and keep ditchlines free and clear of debris, sediment, and cutslope material
- ✓ Ensure culvert inlets and outlets are clear of debris and free-flowing
- ✓ Do not obstruct drainage systems with decking, processing, or piling activities
- ✓ Rehabilitate any equipment trails impacting drainage systems immediately following use

### TEMPORARY / SEASONAL SHUTDOWN

- ✓ Monitor the weather forecast to anticipate in advance when a shutdown may be required
- ✓ Consider the anticipated length of shutdown, season of operations, and the likely amount of precipitation to occur while the site is shutdown
- ✓ Give yourself time to:
  - Inspect the condition of the drainage systems prior to shutdown
  - Conduct required maintenance to remedy any deficiencies
- ✓ Additional water control measures may be required such as:
  - Using waterbars to failsafe culverts
  - Using chevrons/herringbones to control road surface runoff
  - Removing log decks, any woody debris, and equipment that may impede water flow
  - Undertaking stream cleaning prescriptions prior to expected high flows

### DEACTIVATION

- ✓ Ensure a Qualified Professional has created a site-specific deactivation plan that incorporates applicable recommendations from assessments such as Terrain Stability Assessments and Site Plans
- ✓ Re-establish natural drainage patterns following the removal of drainage structures
- ✓ Ensure excavated materials and/or woody debris are not in danger of being reintroduced into drainage systems
- ✓ Armour outfalls with rock or suitable material
- ✓ Ensure adequate ditchblocks are located to direct water through cross ditches
- ✓ Ensure the road bed is left in a stable and self-maintaining state with the use of:
  - Waterbars
  - Pullback
  - Chevrons/Herringbones
  - Slope recontouring and rehabilitation
- ✓ Grass seed exposed soils, where required, as per the plan
- ✓ Install barricades and hazard signage

***STOP WORK and contact your Supervisor and BCTS if any part of the plan is unclear, or if you believe the work cannot be completed safely or may cause negative environmental impacts.***