

## 6.1 Mandatory Procedures & Best Practices

Following is a table that summarizes in approximate chronological order the mandatory procedures and best practices with respect to the inspection and maintenance of Forest Service roads. Links are provided to direct the reader to the location in the manual text where the tabular item is discussed.

Table 6-1 Road and Structure Inspection and Maintenance

<p>Results to be achieved:</p> <ul style="list-style-type: none"> <li>• protection of water quality at licensed waterworks (FPPR s. <a href="#">59</a>, <a href="#">60</a>)</li> <li>• working outside of riparian management areas (FPPR s. <a href="#">50</a>)</li> <li>• protection of fish passage and fish habitat (FPPR s. <a href="#">56</a>, <a href="#">57</a>)</li> <li>• protection of the structural integrity of the road prism and clearing width (FPPR s. <a href="#">37</a>, <a href="#">38</a>, <a href="#">54</a>, <a href="#">79</a>)</li> <li>• the drainage systems of the road are functional (FPPR s. <a href="#">79</a>)</li> <li>• the road can be safely used by industrial users (FPPR s. <a href="#">79</a>)</li> <li>• protection of wildlife and other resource features (FPPR s. <a href="#">69</a>, <a href="#">70</a>)</li> </ul>	
M1	For each road that the ministry is responsible for maintaining, a CM <b>must</b> be designated to determine a system for determining the nature and extent of road and structure inspections and maintenance, and that CM <b>must</b> decide upon the extent, if any, of other member or professional specialist input required.
M2	The CM <b>must</b> prepare a maintenance plan for each road that the ministry is responsible for maintaining, incorporating any measures prepared by other members or professional specialists.
M3	The Coordinating Member <b>must</b> sign (and seal as appropriate) the <a href="#">Road Project Assurance Statement (PDF)</a> for each completed maintenance plan.

B1	Use the results of an engineering risk analysis to prepare road maintenance inspection schedules and establish priorities for road maintenance inspections. [see <a href="#">Road Risk Ratings</a> ]
B2	For non-industrial use FSRs maintained by the Ministry, carry out road maintenance inspections in accordance with the frequency levels provided in Table 6-3, and after receiving any reports of potential hazard events along the road or of actual damage to the road, forest resources, or other values. [see <a href="#">Non-industrial use FSRs maintained by the ministry</a> ]
B3	Record in a road inspection report any deficiencies observed. [see <a href="#">Road Maintenance Inspection Reports</a> ]
B4	Consult with the ministry bridge engineer when developing the annual strategy and the contracts for routine condition and close proximity bridge and major culvert inspections [see <a href="#">Types of Inspections</a> ]
M4	Unless a professional engineer specifies otherwise, engineered structures composed of steel, concrete, or treated timber <b>must</b> be inspected by a qualified Inspector at least once every three years, unless access to the structure is prevented by a man-made or naturally occurring barricade or blockage, and a record of the inspection made. If retaining structures or bridge stringers are untreated wood and/or the bridge abutments are untreated log cribs, the structure <b>must</b> be inspected at least once every two years, unless access to the structure is prevented by a man-made or naturally occurring barricade or blockage [see <a href="#">Engineered Structure Inspection Frequencies</a> ]
M5	All close proximity engineered structure inspections <b>must</b> be carried out by a professional engineer or under a professional engineer's direct supervision [see <a href="#">Close Proximity</a> ]
B5	Ensure that the ministry bridge engineer reviews the engineered structure inspection reports and determines whether a follow-up professional inspection is warranted [see <a href="#">Structural Deficiencies</a> ]

B6	Where the ministry bridge engineer determines that a bridge will be posted as downrated or a structure is being recommended for closure or removal, the ministry bridge engineer advises the TSM/District Manager accordingly as soon as practicable [see <u>Structural Deficiencies</u> ]
B7	Document all road maintenance inspections using a suitable road maintenance inspection report. Place a hard copy of the report on file for possible future review by the appropriate ministry manager or for review by others in the case of forest practices audits. [see <u>Road Maintenance Inspection Reports</u> ]
B8	Ministry staff that travel on FSRs have a responsibility to report to the TSM/District Manager any road maintenance problems that they observe in the course of their duties, and believe are significant. [see <u>Routine Observations</u> ]
M6	The District Manager <b>must</b> advise a new designated maintainer (under RUP) of any chronic or current maintenance issues that may exist along that part of an FSR for which the maintainer is responsible. In those situations where the only industrial users are TSL holders, and the maintainer is a TSL holder, BCTS <b>must</b> collect sufficient data to address those maintenance issues and provide the information to the District Manager in a timely manner for review and dissemination to the maintainer. [see <u>Industrial Use FSR</u> ]
B9	Ensure that road maintenance inspection reports are reviewed and signed off by the appropriate Ministry staff prior to filing. Additionally, enter a record of the road maintenance inspection report into the appropriate computerized road management system. [see <u>Road Maintenance Inspection Reports</u> ]
B10	Where the responsibility for maintenance has been delegated to a Road Use Permit (RUP) holder, forward a copy of the inspection report, along with a District Manager's covering letter highlighting any structural deficiencies, to the RUP holder [see <u>Road Maintenance Inspection Reports</u> ]

B11	Retain road inspection reports on file as documented evidence that inspections have been carried out, and to serve as references for future maintenance projects. [see <a href="#">Road Maintenance Inspection Reports</a> ]
B12	After completing a road or engineered structure inspection, carry out any recommended maintenance works to address deficiencies in a time period that is commensurate with the risk to the road or structure, its users, and forest resources and other values [see <a href="#">Scheduling Maintenance Works</a> ]
B13	Carry out road maintenance to ensure user safety and stability of the road prism; minimize sediment transport from the road prism; and ensure that the road system will fulfill its designed function until deactivation [see <a href="#">Road Prism Maintenance</a> ]
B14	Carry out stream culvert maintenance to ensure that a structure maintains its capability to pass fish and convey stream flow [see <a href="#">Stream Culvert Maintenance</a> ]
B15	Carry out surface and structural maintenance of engineered structures in accordance with the inspection reports, and carry out a follow-up inspection of structural repairs to confirm that the work has been done in conformance with the proposed repairs in the inspection report [see <a href="#">Structure Maintenance</a> ]
B16	Ensure that the necessary steps in the inspection and maintenance processes were undertaken and issues addressed [see <a href="#">Project Tracking Checklist (PDF)</a> ]
M7	The Coordinating Member <b>must</b> sign (and seal as appropriate) the <a href="#">Road Project Assurance Statement (PDF)</a> for the maintenance work that was carried out,

<sup>1</sup>In the above table of chronological events:

- **M** = Mandatory procedures
- **B** = Best practices

