

7.4 Deactivation Prescriptions

7.4.1 Prescription Requirements

A CM **must** prepare and sign and seal the deactivation prescription for the project, and provide the results of any assessments in the letter or report that accompanies the deactivation prescriptions. Ensure that the deactivation prescription is reviewed by the District engineering technician for conformance to objectives.

A deactivation prescription is a written document that clearly communicates the objectives and the works to be performed, in accordance with the regulatory requirements in the Forest Planning and Practices Regulation (Sec. 82). Ensure that any deactivation prescription:

- defines the objectives of the planned deactivation work, the vehicle access requirements (if an exemption under legislation has been granted to permit access by motor vehicles), and the techniques to be performed by station; and
- reports special requirements (e.g., worker safety and slope stability issues).

When a prescription is being prepared, ensure that the following are retained:

- original field notes;
- final deactivation maps, tabular summary, and letter or report, as applicable; and
- any relevant correspondence.

Site specific information, detail and complexity of a deactivation prescription varies with site conditions and the work required to achieve the deactivation goals. Such prescriptions may be as simple as providing directions to an operator with a basic map or may be as complex as having a detailed prescription of individual steps and site specific work requirements.

Use simple deactivation prescriptions where there are no perceived hazards from the deactivation to worker safety and public infrastructure, or where the prescribed work is not expected to create adverse environmental impacts. In these situations, provide Standard Operating Procedures (SOPs) in the form of basic directions to an operator with a signed and sealed map of the prescribed work area.

As the complexity of the site increases where there are fish streams, terrain stability hazards along or adjacent to the road system, or potential consequence to public infrastructure, provide a greater detailed and prescriptive signed and sealed report with definitions/sketches, as well as maps/drawings referenced to stations in the field to assist an operator in completing the work. In such situations, the CM **must** carry out or delegate field reviews as the work progresses to confirm site conditions and to provide quality assurance of the work.

A detailed road deactivation prescription may include:

- a station by station description of conditions and mitigation measures prescribed;
- a map showing the locations of the measures prescribed;
- identification of site conditions that may be a concern for worker safety;
- identification of special concerns that affect the timing or conduct of the work; and
- recommendations for equipment or special work procedures necessary to complete the work.

Carry out all required referrals to other government agencies at appropriate stages during development of prescriptions, and incorporate, where feasible, the requirements of those agencies. As well, obtain approvals for any works in and about a stream, as are required from the Ministry of Environment [[Water Regulation \(Part 7\)](#)], under the [Water Act \(Sec. 9\)](#)] and [Department of Fisheries and Oceans Canada](#) (migratory fish). For information related to deactivation of crossings of fish streams, refer to the [Fish-stream Crossing Guidebook \(PDF, 4.3MB\)](#).

7.4.2 Phases of Prescription Development

Base road deactivation prescriptions on suitable office review of available relevant information and on field assessment. Prescriptions include a deactivation map, as well as other documentation necessary to ensure that the works are successfully conducted and the objectives of deactivation are achieved. These phases are discussed briefly below.

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Office review

Prior to field work, conduct an office-based review of existing information including local knowledge to help identify the potential resources at risk, terrain stability/landslide concerns (especially below the road corridor), sediment hazards, and consequences at and adjacent to the road.

Field assessment

Carry out a field assessment and prescribe deactivation techniques at specific locations.

This task typically involves:

- traversing the road corridor and identifying potential stability and drainage hazards;
- evaluating the risk to resources; and
- marking prescription activities in the field.

When developing prescriptions, consider both the landslide hazard associated with the road and the risk to downslope and downstream resources.

Before choosing a deactivation technique (or combination of techniques), evaluate the following items:

- if any access by motor vehicles is permitted, the type of vehicle access following deactivation;
- the stability of the road cuts and fills, the condition of culverts and bridges, the performance of the existing road drainage system, existing sediment sources, and the potential for further deterioration of road structures and prism;
- the stability of the terrain below (and, in some cases, above) the road corridor; and
- any existing access problems that may prevent or impede equipment access to the end of the road to start the deactivation work (e.g., locations where large landslides have destroyed the road grade in gully areas, large cut slope landslides, existing deactivation work, etc.).

Collect and record other useful site data that provides rationale for the prescriptions, including, for example:

- surficial materials and geomorphologic processes;
- angles of natural and constructed slopes;
- length of fill slopes;
- height of cut slopes;
- road gradient;
- existing structures;
- streams, seepages, and road drainage controls.

Consider using a standard field data form to enhance the consistency and quality of data gathering.

- [Example Data Form for Deactivation Field Assessments \(PDF\)](#)

Preparing maps, tabular summary, letter or report

Provide a deactivation map (or work plan) to scale to accompany a deactivation prescription, plus one or more of the following:

- a summary (in table form) of prescribed techniques, by station; and
- a letter or report.

These requirements are more fully discussed below. Also, the following examples show the linkage between various site and project conditions and the minimum content of a road deactivation prescription:

- [Examples: prescription content requirements \(PDF\)](#)

Content of Deactivation Map (Work Plan)

Provide a map at 1:5000 scale or other suitable scale. Consider the following for illustration on the map, as deemed appropriate to effectively communicate the design requirements to equipment operators and supervisory personnel:

- proposed vehicle usage after deactivation (4-wheel drive (with no barricades), all-terrain vehicle, no access);
- topographic information;
- additional relevant planimetric information (e.g., streams, bodies of water, legal boundaries, landslides, utilities, highways);
- additional supporting information such as stream classifications, and timing windows and measures for work in and around stream crossings (where applicable);
- special site access requirements;
- sites of potential concern for worker safety;
- requirements for terrain stability field reviews by a Specialist;
- special requirements for work carried out within a community watershed;
- location of all prescribed deactivation techniques by station (road chainage and prescription symbol), including the type and locations of hazards (e.g., record road segments that may be unstable before, during, or after road deactivation work);
- legend for prescription symbols;
- date of the assessment;
- name of the assessor; and
- scale bar and north arrow.

Note: Provide some of the items above in a tabular summary rather than on the 1:5000 scale map if this would more clearly depict the work.

Content of Tabular Summary

Use a tabular summary where:

- more detail is given to communicate the requirements of the project to forestry operations personnel;

- the risk of damage to adjacent resources is moderate or high; or
- it may be necessary to re-establish the field markings.

In the tabular summary, provide:

- the measured chainage along the road;
- the associated recommended actions; and
- detailed comments about such items as:
 - site conditions;
 - worker safety issues;
 - key reference points;
 - rationale for road fill pullback; and
 - depth and width of cross-ditches.

Use the tabular summary as a tool to assess the results of the risk analysis, and to help estimate the costs of road deactivation works.

Content of Letter or Report

Provide a report to accompany and complement deactivation maps and tabular summaries if:

- there is a high risk to the environment;
- the project is large or complex; or
- the road traverses areas of moderate to high likelihood of occurrence of landslides.

In the report, provide an estimate of the expected level of residual risk at the project site if the works are carried out in overall conformance with the prescriptions. Residual risk is the amount of risk remaining following the implementation of all hazard or risk control measures specified in the prescriptions, because it cannot practicably be further reduced. Ensure that any concerns about residual risk are brought to the attention of the District Manager, who determines if and how the district may manage the residual risk after the road is deactivated.

Generally, for small projects, use a brief letter rather than a report. Provide in a letter or report the following topics, as relevant:

- geographical location information (watershed name and number, harvesting tenure);
- background information;
- description of deactivation objectives;
- prescription methodology;
- road reactivation considerations (such as road reconstruction, wet crossings, and safety issues);
- site level information;

- results and recommendations; and
- site plans and illustrations.

7.4.3 Modification of Prescriptions

To address unforeseen site conditions, it may be necessary to modify the prescription. If there are reasonable grounds to believe that the changes to the prescription would not adversely impact forest resources or other values, the required changes can be made without further approval. At the start of the project, it is often useful to establish a protocol for the types of changes that can be made on site. Where such changes are made, the CM ***must*** approve all changes to the prescription.