BRITISH COLUMBIA

FIA Activity Standards Document

Restoration & Rehabilitation Component, Terrestrial Activity Area, **Treatments and Treatment Effectiveness Evaluation Activities** and

Strategic Resource Planning Component, Developing Management Unit or Watershed-Level Strategies Activity Area

Effective Date: April 30, 2006

Ministry of Environment

Strategic Resource Planning Component, Management Unit or Watershed Level Strategies Activity Area: This activity specific standard addresses planning processes and minimum requirements to determine terrestrial restoration priorities.

Restoration and Rehabilitation Component, Terrestrial Activity Area and Treatments and Treatment Effectiveness Evaluation Activities: This standard covers the general requirements for: a) assessing a restoration site; b) developing a terrestrial restoration plan; c) reporting on project activities; d) inspecting and maintaining investments; and e) evaluating treatment effectiveness. On site treatment is not covered under this standard, as each project will be relatively unique. Terrestrial restoration on-site treatments will be considered as operational trials and therefore "innovative", and the process for submitting proposals and gaining approval must follow the criteria for innovative projects.

If a project is using silviculture treatments, and is intended to fulfil Crown silviculture obligations with the primary objectives for wildlife habitat or biodiversity and secondly for timber production, the project should be considered under the Stand Establishment and Treatment Component, Stand Treatments to Meet Non-timber Objectives.

An application for FIA funding may include any one, some or all of the above project components.

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1.0 APPROACH, EXPECTATIONS, AND ELIGIBLE ACTIVITIES

The *Recipient's* approach to terrestrial restoration will be to address high priority areas where *terrestrial ecosystem integrity* is compromised. A successful terrestrial restoration project will typically include the following elements:

- **A regional perspective:** areas will be chosen for restoration based on regional priorities;
- **Clear goals and objectives:** restoration goals and objectives must address terrestrial ecosystem integrity and must be specific, achievable, and measurable;
- **Cost-effective prescriptions implemented on priority sites;**
- **Inspection and maintenance:** a representative portion of treated areas should be inspected to determine maintenance needs; inspections and maintenance will usually be scheduled in advance and may also be based on natural events and prospective risks to the work; and
- **Treatment effectiveness evaluations (monitoring):** a representative portion of treated areas should be evaluated to determine and improve the effectiveness of the treatments.

Investments are expected to result in:

- Identification of high priority areas and sites for which restoration prescriptions are developed;
- Implementation of high priority and cost effective terrestrial ecosystem restoration projects;
- Completion of inspections and maintenance to ensure benefits continue;
- Collection of monitoring (effectiveness evaluation) data/information that will improve current and future riparian restoration projects; and
- Restoration of *terrestrial ecosystem integrity* sooner and or more effectively than if no action was taken.

Eligible work described in these standards includes: *(1) selecting priority areas for restoration within a management unit or watershed; (2) assessing a chosen restoration site or sites; (3) developing a restoration plan; (4) project reporting including a standardized project abstract; (5) inspection and maintenance requirements; and (6) requirements for treatment effectiveness evaluations.*
(http://www.for.gov.bc.ca/hcp/fia/landbase/r_and_r_eligible_activities.htm)

The following standards apply to all eligible activities. Examples of eligible projects include using silviculture and other treatments to: 1) maintain, recruit or enhance wildlife habitat and biodiversity; 2) re-establish natural ecosystem processes (e.g., using thinning and burning in fire maintained ecosystems); 3) maintain or restore habitat elements for threatened and endangered species and ecosystems (e.g., pruning to further develop features needed in a Wildlife Habitat Area (WHA)); and, 4) manage/eradicate invasive species that are detrimental to a species at risk habitat.

The standards will be periodically updated to reflect improvements in technical and procedural guidance.

2.0 DEFINITIONS

In this document, the following words or terms are defined as follows:

Administrator administrator of the Forest Investment Account

Coordinating Registered Professional A Registered Professional Forester or Registered Professional Biologist who is the designated representative for the *Recipient*, and who is responsible for ensuring that all work and planning is done to standard

FIA Forest Investment Account

Recipient a party designated by the Ministry of Forests to receive FIA funding pursuant to a Recipient Agreement

Recipient Agreement the contract between an Administrator and a Recipient for performance of the Work

Reference Ecosystem an ecosystem that is less disturbed or altered than the one undergoing restoration. A reference ecosystem represents the target conditions for the ecosystem requiring restoration. Reference ecosystems must often be inferred from regional and historical data.

Registered Professional a member in good standing with one of the following professional associations: Association of British Columbia Forest Professions, Association of Professional Biologists of British Columbia (College of Applied Biology Act)

Terrestrial Ecosystem Integrity the quality of a natural unmanaged or managed ecosystem in which natural ecological processes sustain the function, composition and structure of the system.
Work the work described and funded under a *Recipient Agreement*
Work Area means individual locations, watersheds or other particular areas or locations where *Work* is to be undertaken or within any area of Crown land occupied for purposes of the *Work*

3.0 GENERAL REQUIREMENTS

Contractual and Legal Responsibilities

3.1 The *Recipient* must carry out all work consistent with the requirements of this FIA Activity Standards Document and in compliance with the laws of Canada and British Columbia applicable to the *Work* and *Work Area*.

3.2 The Recipient must retain all data, reports, photographs and maps required to be produced by this FIA Activity Standards Document for a period of not less than three years.

3.3 The Recipient must forward all documents that are required to be produced and retained for three years to the Ministries Library, within two months of the completion of the project, by sending an email to ForProdres@gov.bc.ca.

3.4 Despite any *Work* or improvements on Crown land that may be performed or made by the *Recipient*, the sole ownership of all *Work Areas* and any improvements remains with the Province.

Qualifications and Responsibilities of Personnel

3.5 The *Recipient's* representative must act as the *Coordinating Registered Professional* for the project. This individual will take overall responsibility and accountability for the project, which includes engaging and coordinating the appropriate team of *Registered Professionals* (i.e., Registered Forest Professional and or Registered Professional Biologist) to be responsible for the various phases of the project. The *Coordinating Registered Professional* and the *Registered Professional* may be the same person.

3.6 The *Registered Professional(s)* responsible for the phases of the project must comply with the FIA standards for the respective activities, as described below.

3.7 The *Registered Professional(s)* will:

(a) Maintain a current knowledge and understanding of advances in the relevant terrestrial restoration theory and application;

(b) Sign all terrestrial treatment prescriptions and other plans/reports for the project, and provide a statement (on the plans or in a separate letter) that the prescriptions were prepared consistent with the requirements of this FIA Riparian Activity Standards Document and all other applicable legislation.

(c) Consider the following technical references, and provide suitable acknowledgement of these and other relevant references in the appropriate phases of the project.

Technical References

3.8 The following reference documents are general sources for terrestrial restoration. Every individual project will require other sources as well. The *Registered Professional* must use their professional judgement to choose methods and techniques that best serve the individual project objectives and are consistent with legislative requirements.

The *Registered Professional(s)* will consider the following references where applicable:

Planning

Holt, R. 2001. Strategic Ecological Restoration Assessments – Results of Regional Workshops. http://www.env.gov.bc.ca/wld/documents/fia_docs/sera_terp_summary.pdf. (*These assessments were done for each forest region and provide information on high priority BEC subzones for restoration treatments)*

Douglas, T. 2002. Ecological Restoration Guidelines for British Columbia. Biodiversity Branch, Ministry of Water, Land and Air Protection. [PDF rest_guidelines; HTML rest_guidelines] (*this document provides context and tools for restoration planning)*

B.C. Ministry of Forests and B.C. Ministry of Environment, Lands and Parks. 1997. Biodiversity guidebook. Victoria, B.C. http://www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/biodiv/biotoc.htm.

Assessment

Field Guides for Site Identification and Interpretation for the various regions of the province: http://www.for.gov.bc.ca/hfd/pubs/lmh.htm.

Douglas, T. 2002. Ecological Restoration Guidelines for British Columbia. Biodiversity Branch, Ministry of Water, Land and Air Protection. .[PDF rest_guidelines; HTML rest_guidelines] (*document provides steps for restoration assessments)*

Effectiveness Evaluations (Monitoring)

Machmer, M and C. Steeger. 2002. Effectiveness Monitoring Guidelines for Ecosystem Restoration. Prepared for the Habitat Branch, Ministry of Water, Land and Air Protection, by Pandion Ecological Research Ltd., Nelson, BC. [http://wwww.env.gov.bc.ca/wld/documents/fia_docs/rest_effect_mon_guidelines_s.pdf]

Report Examples:
Restoration Plan – a sample restoration plan is available at the following URL (from Douglas 2002): . [PDF rest_guidelines]

Effectiveness Evaluation – (contact Colene.Wood@.gov.bc.ca for a copy of "An Effectiveness Monitoring Plan for NDT4 Ecosystem Restoration in the East Kootenay Trench").

4.0 PLANNING

Under the Strategic Resource Planning Component of the FIA, (http://www.for.gov.bc.ca/hcp/fia/landbase/strategic_resource_planning.htm), Land Based Investment Rationales or Sustainable Forest Management planning can identify the need to develop terrestrial restoration plans for areas within a particular management unit. This need will usually be based on existing regional analyses and assessments, land use planning, and or expert opinion. Some kind of planning process or documentation is necessary to justify choosing terrestrial restoration sites. The following outlines the minimum requirements/documentation for planning.

Planning Requirements

4.1 The *Coordinating Registered Professional* must demonstrate that planning and prioritization has occurred at the management unit level, prior to proceeding with terrestrial assessments and restoration plan development. Data and a written rationale must document:

(a) how certain portions of management units were prioritized for terrestrial restoration;

(b) which sites within the priority area(s) are high priority for further assessment, based on restoration goals and the likelihood of treatment success for the management unit or watershed; and

(c) area and site-level restoration objectives, and potential treatments to address the loss of *terrestrial ecosystem integrity*.

4.2 If the above documentation cannot be synthesised from existing information, the *Coordinating Registered Professional* must select a suitable assessment procedure and team of *Registered Professionals* to obtain the required information described above.

4.3 The Coordinating Registered Professional will consider the Technical References described in clause 3.8, as well as any other generally accepted and or pertinent references.

4.4 The Coordinating Registered Professional will consider previously completed plans, assessments, and any other pertinent literature or documents when choosing potential restoration sites.

4.5 The Coordinating Registered Professional will make the planning documentation available to the *Administrator* upon request. This documentation must be held by the Recipient for a minimum of three years, and be available for auditing by the Ministry of Forests and Range or the Ministry of Environment.

5.0 TERRESTRIAL RESTORATION ASSESSMENT

The Planning phase prioritized areas and sites, and recommended priority areas/sites for more detailed assessment based on suspected impairment of *terrestrial ecosystem integrity*. An assessment will collect data and information in order to prioritize sites for prescription development, and provide preliminary recommendations for restoration. An assessment process applicable to any project is found in Douglas (2002) ([PDF rest_guidelines; HTML rest_guidelines]). The minimum requirements for carrying out an assessment are described below.

Terrestrial Restoration Assessment Requirements

5.1 For project types that have accepted and standardized data collection methodologies (e.g., burn planning methodologies, silviculture surveys), the *Registered Professional* must apply those methodologies.

5.2 For project types where data collection is not standardized, the *Registered Professional* must use professional judgement and site-appropriate data collection. The *Registered Professional* must also use the following steps when assessing a potential restoration site:

a. identify and map the boundaries of the site(s);
b. identify the cause(s) of damage to the site(s), and ensure that these causes will not significantly affect the restoration project;
c. set preliminary restoration goals and objectives;
d. identify and contact stakeholders and partners that can contribute to the assessment and restoration process;
e. gather and analyze existing information and data, such as: ecosystem classification, current maps, reports, plans, aerial photographs, vegetation information (e.g. forest cover maps, grassland maps, existing inventories), rare and endangered species and ecosystems in the area of interest, and any available historical information on land use and condition.
f. survey the site. The site survey will typically entail quantitative data collection – the *Registered Professional* is responsible for ensuring that the appropriate type and quantity of data is collected to inform the restoration prescriptions, as well as to prepare for future effectiveness evaluations (see Section 9.0).
g. create a map. The map should include at minimum: vegetation polygons and treatment area boundaries, any special management areas or features, aquatic features (if any), and any infrastructure or access.

5.3 Based on data collection, mapping and analysis, the *Registered Professional* must develop preliminary terrestrial restoration prescriptions. (These prescriptions will be further developed in a Restoration Plan.)

5.4 The outputs of every terrestrial restoration assessment must include:
a. field data to inform restoration prescriptions and future effectiveness evaluations;
b. preliminary restoration goals and objectives;
c. preliminary recommendations for restoration prescriptions;
d. a list of priority sites for restoration, and preliminary restoration prescriptions for each; and,
e. a discussion of methods used to complete the assessment.

5.5 The terrestrial restoration assessment outputs must be compiled into a report that is signed by a *Registered Professional*. If desirable, these outputs can instead be included in the Restoration Plan (see Section 6.0). In either case, the outputs must be available to the *Administrator* upon request. The outputs must be held by the *Recipient* for a minimum of three years, and be available for auditing by the Ministry of Forests and Range or the Ministry of Environment.

6.0 RESTORATION PLAN

The Restoration Plan is the outcome of all planning efforts and contains all the information necessary for terrestrial restoration treatments to proceed. A sample restoration plan with instructions for completion is included in Appendix 1 of Douglas (2002) (PDF rest_guidelines; HTML rest_guidelines). The minimum requirements for developing a restoration plan for terrestrial treatments are described below.

Restoration Plan Development Requirements

6.1 Prescriptions must be based on assessment information collected for priority sites. Documentation is required to show how priority sites were chosen.

6.2 Prescribed treatments must be incremental to any existing licensee obligations on the sites.

6.3 Prescribed treatments must conform to current legislation and standards where applicable.

6.4 If data collected during the previous assessment phase do not provide the detailed quantitative information required to develop restoration treatment prescriptions, more data must be collected as per the judgement of the *Registered Professional.*

6.5 For ecosystem restoration burning, planning requirements are found at the following website: http://www.for.gov.bc.ca/protect/burning/planning.htm. All requirements listed on this site must be complied with when developing a burn (restoration) plan, in addition to the requirements listed below.

6.6 For all projects, the restoration plan must include the following components:
a. an introduction: an overview of the project and key components of the Plan;
b. a project rationale: details describing the need to undertake this project;
c. a site description, including photos of typical site features and pre-treatment conditions, and a site map that shows restoration locations and relevant site features;
d. site history and related disturbance;
e. project goals and objectives;
f. detailed restoration prescriptions, including:
- a description of the *Reference Ecosystems* – actual or inferred – that were used to inform the prescriptions;
- restoration objectives for each treatment type - these objectives must be specific and measurable;
- species or habitat features of special management concern;
- maps showing vegetation polygons, treatment area boundaries, any special management areas or features, aquatic features (if any), and any infrastructure or access.
- onsite supervision and workforce, logistics, permits and safety concerns, including Workers Compensation Board safe working practices.
- a schedule and projected completion costs of each restoration activity
- a description of methods used to develop the prescriptions.

g. data describing pre-treatment conditions so that future effectiveness evaluation (monitoring) can be conducted. The amount and type of data required will depend on the effectiveness evaluation objectives (see section 9.0 and Machmer and Steeger (2002) in clause 3.8);
h. proposed methodology and a schedule for inspections, maintenance and effectiveness evaluations (see sections 8.0 and 9.0)

6.7 The restoration plan must be signed by a *Registered Professional.*

6.8 The restoration plan must be available to the *Administrator* upon request. This report must be held by the *Recipient* for a minimum of three years, and be available for auditing by the Ministry of Forests and Range or the Ministry of Environment.

7.0 PROJECT REPORTING AND PROJECT COMPLETION ABSTRACT

The following is the standard for project reporting ('as-treated' reports) and the standard/ template for completing the Project Completion Abstract. All project reporting must be completed according to the timing as per the *Recipient Agreement*.

Requirements for Project Reporting

7.1 An as-treated report must be completed to describe the work. This report must include:
a. costs per hectare for each treatment type, final project costs, and number of person days;
b. maps and descriptions of the polygons treated;
c. representative photographs for each treatment type;
d. descriptions of any departures from the restoration plans, and the reasons for them;
e. descriptions of the treatments and treatment locations sufficient to allow for future inspections and maintenance (see section 8.0);
f. a suggested schedule for future inspections and maintenance;
g. any suggestions to improve similar projects in future.

7.2 For future treatment effectiveness evaluation, the 'as-treated' report must include data on pre–treatment conditions (see clause 6.6 g) and on conditions present immediately after treatment. The amount of detail and the type of data collected will depend on the type of treatment, and the effectiveness evaluation objectives (see section 9.0). Potential effectiveness evaluations and a proposed schedule for effectiveness evaluation must also be included.

7.3 Ministry of Forests and Range silviculture reporting standards for ISIS must be followed whenever the tree species composition of a site changes.

7.4 The as-treated report must be available to the *Administrator* upon request. This report must be held by the *Recipient* for a minimum of three years, and be available for auditing by the Ministry of Forests or the Ministry of Water, Land and Air Protection. The report must be sent to ForProdres@gov.bc.ca in order to be included in the Ministries Library.

7.5 A Project Completion Abstract must be completed as per the standard/template on the following pages. Copies of this abstract must be provided to ForProdres@gov.bc.ca**.** The abstract must not be more than two pages in length.

Project Completion Abstract Standard/Template:

[Insert project name, watershed, and Forest Region/District here]

Objectives of the overall project

Briefly state the objectives of the project, including how *terrestrial ecosystem integrity* was addressed.

FIA Investment Schedule Number, Project Number, and Fiscal Year

For cross-reference purposes, provide the unique FIA Investment Schedule Number, Project Number, and Fiscal Year the work was completed.

Recipient Name and Division

Specify the Recipient Name and Division responsible for the project.

Names/Affiliation of Registered Professionals Involved in the Project

Specify the names of the Registered Professionals involved and their professional affiliation.

Author(s) of the Project Completion Abstract

Give the author's name(s), title, affiliation, mailing address, fax number, telephone number, email address.

Name of Area/Watershed & Work Location

Give the name of the watershed or management unit. Describe the geographical location of the work area, and how best to access the area. Provide the Universal Transverse Mercator (UTM) grid coordinates or longs/lats of a convenient access point or an area of particular interest.

Introduction

Provide a brief summary of the background and history that prompted development of the project. Make particular reference to the prioritization and at what level this was done (e.g., SFM planning). List the assessments that contributed to treatment decisions.

Include applicable details. Briefly describe details of any previous work that may have been carried out at the site related to restoration.

Description of Restoration Prescriptions/Plans

Provide information about the restoration prescriptions/plans, including their objectives and a rationale for the type of treatments planned.

Description of Completed Work

Provide the start and completion dates of the work at the site.

Summarize the number of hectares treated in total and for each treatment type, and provide any relevant details regarding the work activities and treatments provided.

Cost Summary

Activity costs – provide the cost per hectare for each treatment type, including labour, equipment and materials. Provide the total cost of the work.

Post-treatment Inspections and Maintenance

State the purpose and timing of post-treatment inspections and/or maintenance.

Effectiveness Evaluations

Discuss plans and a schedule to evaluate treatment effectiveness.

Photographs

Include site photographs to show typical pre treatment and post-treatment conditions (maximum of 3 photos). Provide photo numbers and captions for all photographs provided, and make reference to the photos in the above text.

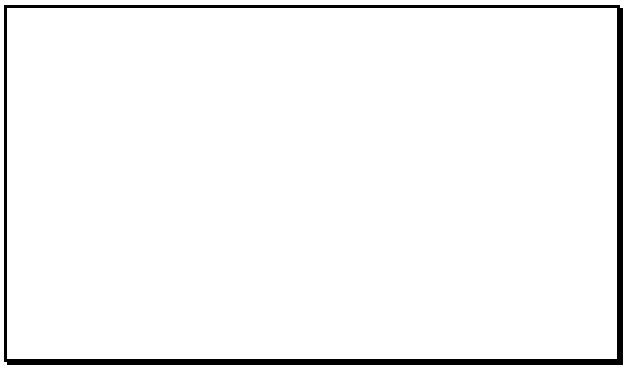

Photo 1. Caption

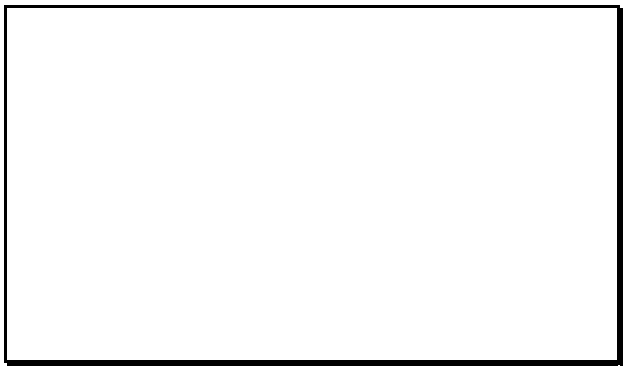

Photo 2. Caption

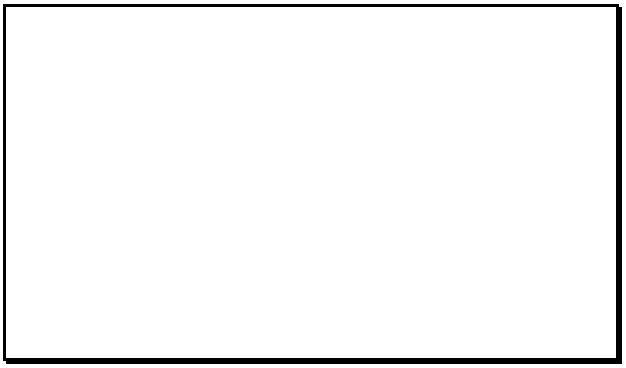

Photo 3. Caption

Note to Author:

The layout of the Project Completion Abstract should be in a two-column format (as viewed in Page/Print Layout mode).

8.0 INSPECTIONS AND MAINTENANCE

Inspections and maintenance are a critical aspect of any form of restoration. Without follow-up treatments, some restoration treatments will fail and others will not fully meet restoration goals. The type and frequency of inspections and maintenance will depend on the type of treatments. Some maintenance requirements will be known in advance, and others will be evident only when inspections are made. The minimum requirements for inspections and maintenance are described below. All inspections and maintenance are subject to funding, however, the inspection and maintenance of previous work must take precedence over the initiation of new work.

Requirements for Inspections and Maintenance

8.1 An inspection and maintenance schedule will be created and revised when necessary in order to meet the restoration objectives described in the restoration plan (see Section 6.0).

8.2 The treated areas will be inspected according to how well they meet the restoration prescriptions. If the area no longer meets the restoration prescriptions, maintenance should be prescribed and implemented.

8.3 Any planted tree stock must be inspected periodically and maintained if necessary, until the seedlings are effectively competing with brush and other vegetation. If significant mortality occurs, new trees must be planted and/or the restoration prescriptions must be revised.

8.4 A record of inspection visits and maintenance treatments must be kept, and must be made available to the *Administrator* upon request. This record must be held by the *Recipient* for a minimum of three years, and be available for auditing by the Ministry of Forests and Range or the Ministry of Environment.

9.0 TREATMENT EFFECTIVENESS EVALUATION

Treatment effectiveness evaluations address the question of how successful a project is at restoring the ecosystem or its component parts relative to the initial goals and objectives. It is the process of identifying and monitoring key indicators of ecosystem response to evaluate the success of a restoration initiative. Fundamental questions addressed by treatment effectiveness evaluations include the following:

- Is the restoration work achieving the desired objectives for the targeted ecosystem and/or its component parts?
- Can restoration methods and techniques be improved to optimize recovery of the ecosystem and/or its component parts?
- What modifications are possible to improve the cost-effectiveness of the work?

All restoration projects require some level of effectiveness evaluation. Treatment effectiveness evaluation may entail rapid, mostly qualitative data collection to compare a small number of response variables before and after treatment. For example, a project to establish or release conifers might entail rating the survival and vigour of the trees over five to fifteen years, using visual inspections in years one, five, ten and fifteen, or until the trees are competing well. Certain projects will require a more intensive level of evaluation that entails in-depth quantitative monitoring and analysis over a longer time frame. The appropriate level of effectiveness evaluation will depend on the nature of the restoration project. A conceptual framework and guidelines for effectiveness evaluation are provided by Machmer and Steeger (2002) http://www.env.gov.bc.ca/wld/documents/fia_docs/rest_effect_mon_guidelines_s.pdf). The minimum requirements for treatment effectiveness evaluations are described below:

Requirements for Effectiveness Evaluation

9.1 An effectiveness evaluation must include the following key steps (discussed in more depth in Machmer and Steeger (2002) (rest_effect_mon_guidelines_s.pdf):

a. identification of the treatment effectiveness evaluation objectives. These objectives should complement the restoration project objectives in scale and timeframe;
b. selection of the appropriate level of evaluation. Treatment effectiveness evaluations may be low-intensity and fully or partly qualitative, or they may be more intensive and quantitative (the latter level may be indicated for scientific and statistical purposes). The level of detail desirable will depend on various factors, discussed in more detail in Machmer and Steeger (2002);
c. identification of key response variables (indicators) that are critical to determine whether the project was an ecological success. Usefulness, cost-effectiveness and practicality are factors that help determine which response variables are 'critical' to monitor;
d. development of the treatment effectiveness evaluation design and monitoring protocols. Factors to take into consideration include data collection standards and protocols, and the locations, timing, frequency, and duration of data collection;
e. implementation of treatment effectiveness evaluation. This entails pre- and post-treatment data collection for the key response variable(s), according to the design and protocols developed. All monitoring locations must be permanently marked and readily located;
f. analysis, summaries and interpretation of the collected data; and
g. application of the findings to current and future restoration projects.

9.2 Treatment effectiveness evaluation findings of any significance must be disseminated to interested individuals using forums such as conferences, workshops, peer-reviewed journals, the Streamline restoration bulletin (http://www.forrex.org/streamline/), or email listservs such as WATERSHEDEXT (http://www.forrex.org/listserv/listserv.asp). A project summary can be posted on the Natural Resources Information Network (http://nrin.siferp.org/). More detailed treatment effectiveness evaluations may be appropriate for the online Journal of Ecosystems and Management (http://www.forrex.org/JEM/).

9.3 Effectiveness evaluation results must be documented. The amount of detail necessary will depend on the monitoring intensity. Evaluation results should include a description of the restoration objectives, the effectiveness evaluation objectives, the evaluation design and monitoring protocols, and key response variables. The documented results should also contain a discussion of the following:

a. a summary of monitoring data and any analyses;
b. an assessment of the short-term success of restoration treatment(s) relative to stated objectives (based on effectiveness evaluation data and other evidence gathered to date);
c. any recommendations for change or refinement to the restoration project objectives, treatment prescriptions, treatment implementation, effectiveness evaluation objectives, or monitoring protocols, in order to improve overall success;
d. comments on the cost-effectiveness of the restoration treatments and any possible improvements; and
e. recommendations for continued effectiveness evaluation, including more intensive evaluation, if warranted.

9.4 The documented results of the effectiveness evaluation must be submitted to the Ministries Library ForProdres@gov.bc.ca.

9.5 The treatment effectiveness evaluation results must be available to the *Administrator* upon request. The results must be held by the *Recipient* for a minimum of three years, and be available for auditing by the Ministry of Forests and Range or the Ministry of Environment. For scientific and future planning purposes the maps and results should be kept for a minimum of 20 years, and if possible, for the length of a forest rotation.