



Standard 3: Forest Management

Principle

Forest ecosystem management balances ecological, social, and economic demands with the capacity of forest resources to provide for present and future values.

Relevant Components

- Aboriginal Peoples' rights, claims and/or interests.
- Conservation biology concepts and principles.
- Criteria and indicators for sustainable resource management.
- Concepts of resource scarcity and trade-offs or offsets.
- Forest regulation and policy (provincial, national).
- Forest measurements, forest inventories, mensuration, and non-timber inventories.
- Forest operations and safety.
- Forest resource forecasting and supporting information technology/information management (quantitative and qualitative).
- Global perspective of forestry issues and challenges.
- Harvesting operations and planning.
- History and patterns of human activity in forests.
- Integrated forest management planning and relationships among natural resources and the range of forest values.
- Management (harvesting, roads, silviculture, etc) operations and planning.
- Objectives of private and public forest owners.
- Principles of silviculture, silvicultural systems and spatial distributions of management activities.
- Pollution, erosion, forest fragmentation, forest landscape patterns.
- Public and stakeholder opinions and involvement: economic, social, ecological and other values.
- Requirement and characteristics of effective monitoring/adaptive management regimes.
- Stand, forest and landscape level perspectives.
- Sustained yield and sustainability.

Demonstrable Competency Requirements

A candidate for certification shall be able to:

- 1. Describe the variety of values and competing interests in a forest.**
 - a. Identify and describe the range of values (timber and non-timber) in a forest.**

- b. Identify the interests and rights present in a forest including Aboriginal Peoples' rights, claims and interests in forests and the importance of implementing processes to determine and address them.
 - c. Describe the requirements of and interaction among these values
 - d. Describe the effect and implications of decisions aimed at a given set of objectives
 - e. Describe how values and competing interests are or can be weighed/balanced in decision-making
- 2. Explain forest strategic and operational planning principles.**
- a. Explain why forest planning is required.
 - b. Discuss basic principles of planning.
 - c. Discuss planning tools.
 - d. Differentiate among levels of planning.
 - e. Describe the specific operational elements that should be included in a plan.
- 3. Analyze and apply a range of forest cover manipulation strategies that effectively achieve a given set of objectives while minimizing negative impacts on other values from a perspective emphasizing:**
- a. Commercial extraction as the management objective; and
 - b. Management objectives that are non-extractive.
- 4. Explain the legal and policy framework.**
- a. Describe forest regulation/legislation /policies and procedures (nationally and regionally specific) and the importance to forest management.
- 5. Discuss forest management concepts.**
- a. Explain various management approaches and situations where they might be used.
 - b. Describe risk and uncertainty in forest management options.
 - c. Describe the application, design and function of adaptive management.
 - d. Discuss the cumulative impacts of forestry and other land use practices (e.g. oil and gas, urban development) on various forest resources.
 - e. Describe the role and application of monitoring in forestry.
- 6. Describe how global drive trends and influence forest management.**
- a. Identify global trends.
 - b. Explain the influence of global trends on regionally specific forest management.

- 7. Develop a resource planning document that incorporates current economic, environmental and social values into actions that lead to achieving the planning objectives and to future desired conditions and goals.**
 - a. Identify and describe resource abundance through time and space and determine the management activities required to provide for a sustainable supply of consumptive and non-consumptive goods and services.
 - b. Plan resource use decisions and determine the harvest of resources (including timber) within the context of larger, socially-defined goals.
 - c. Discuss the concept of sustainability and sustained yield and how they might be applied in a management context.

Note: Standard 3 Forest Management contains sociological information that is subject overlap with Standard 6. The overlap demonstrates the flow between the standards and the completion of capstone competencies.