

Principles of Forest Stewardship¹

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REPORT

 $^{1 \}quad \text{As per the \it Foresters \it Act S.4(2)(b) "to advocate for and uphold principles of stewardship of forests, forest lands, forest resources and forest ecosystems"}$

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Background and Purpose

Forest Stewardship is the responsible use of forest resources based on the application of an ecological understanding at the stand, forest and landscape levels which maintains and protects ecosystem function, integrity and resilience. It is based upon an ethical responsibility to the land and people for current and future generations.

The definition of forest stewardship is the foundation for the following seven stewardship principles. The integration of these into daily practice will assist forest professionals in maintaining the integrity and resilience of forest ecosystems. The principles are interactive in the decision making process and apply equally to sitelevel plans or to planning on a much larger scale. As a 'living document', these principles may evolve over time, as our use and understanding of them expands.

The *Foresters Act* establishes the profession by defining the practice of professional forestry, the classes of membership and the Association of BC Forest Professionals (ABCFP). It identifies that the ABCFP is composed of all of the members of the association and the members of council.

The word "stewardship" occurs three times in the *Foresters Act* and "principles of forest stewardship" are two of those instances:

- 1. Section 1 defines "conduct unbecoming a member" to include member conduct that "undermines the principles of stewardship that are the foundation of the practice of professional forestry."
- 2. Section 4(2)(b) specifically directs the ABCFP "to advocate for and uphold principles of stewardship of forests, forest lands, forest resources and forest ecosystems."
- 3. Section 11 (1) allows that Council may pass resolutions, including for "(l) the promotion of good forest stewardship."

The seven principles of forest stewardship extend from the *Foresters Act* and are consistent with the Code of Ethics (Bylaw 11) and the standards of Professional Practice (Bylaw 12). In addition to guiding the responsible use of forest resources, they are intended to serve the following purposes:

- Provide further definition to the requirements of the *Foresters Act*;
- Establish a platform for forest stewardship advocacy by the ABCFP and its members; and
- Guide forest professionals in their daily practice of resource decision-making;

- upholding the principles of stewardship of forests, forest lands, forest resources and forest ecosystems.
- Provide additional measures of professional guidance for members, relative to upholding the principles of stewardship of forests, forest lands, forest resources and forest ecosystems;

The Principles

1. Ecological Integrity

Stewardship requires the maintenance of structure, composition and function of forest ecosystems within ranges that ensure the long-term diversity and resilience of the ecosystem.

Ecological integrity refers to the wholeness of ecosystems, as well as the capacity to retain that wholeness over time, in response to change or disturbance. Maintaining ecological integrity requires recognition of valued ecosystem components² at the site level, the landscape level and on a global scale.

2. Information and Understanding

Stewardship requires knowledge of the values present in the forest, as well as science-based understanding of how forest ecosystems function and change over time.

A wide range of information sources are needed by forest professionals for forest stewardship, such as inventories, maps, ecosystem classification, plans and public input. Information sources must be reliable and reasonably up to date. Scientific knowledge as well as traditional ecological knowledge and experience gained through operational practices provide a foundation for our understanding of ecological systems. Forest stewardship often involves a multi-disciplinary team using the best available science and expertise for management and decision-making, to provide accountability for on the ground results.

3. Forest Management Goals and Objectives

Stewardship requires clear goals and objectives to guide management activities on forest land.

Forest stewardship goals and objectives are determined by society and the landowner. They can take the form of legislation, policy or other non-statutory agreements, standards and practices. These goals and objectives reflect a broad spectrum of social perspectives, based on a sufficient level of public engagement, locally and provincially. Forest professionals work with other resource specialists within the framework of these goals and objectives and are relied upon to integrate the range of values present and to plan for the desired outcomes of forest management activities.

² Valued Ecosystem Component (VEC) is defined in the glossary. Site level VECs include species at risk and soil conservation; landscape level VECs include biodiversity and hydrology; global VECs include the carbon cycle and climatic effects.

4. Social Foundation

Stewardship requires management strategies that create benefits consistent with the values and interests of society.

Human well-being is a catalyst for the application of stewardship; therefore, forest management requires an understanding of the full range of forest attributes that provide value to people, including economic, aesthetic, cultural, spiritual or other values that are more challenging to quantify. Responsible forest resource management will integrate and balance the needs of communities over time.

5. Temporal Options

Stewardship ensures that current management strategies are intended to create benefits for both the present and future generations.

Stewardship of forest resources requires that practitioners deliver benefits for today's society without risking options for future generations to enjoy similar benefits over time.

6. Spatial Strategies

Stewardship ensures that an appropriate range of spatial scales are used to monitor, assess and plan forest management activities.

Maintaining a full range of forest ecosystem values requires consideration of the larger scale of a watershed, landscape unit or even broader, up to the global ecosystem. This in turn, guides decisions at the stand level and the activities on the ground. It is important for forest managers to monitor and mitigate cumulative impacts while recognizing that benefits may also become apparent while planning at larger scales.

7. Adaptive Practice

Stewardship requires strategies to minimize and mitigate risk and uncertainty in forest management.

Change is part of both the forest ecosystem and the socio-economic systems that define resource values and management objectives. An adaptive approach to forest management encourages forest professionals to be innovative, using tried and tested practices or new ideas combined with creative problem solving skills. This approach requires periodic re-assessment of basic assumptions and a planning regime that adjusts management strategies over time in response to critical thought and ongoing, monitoring and research. The adaptive approach produces decisions that anticipate likely or possible future events, with flexibility to be able to mitigate unforeseen natural events as they arise.

Guidance on Professional Practice and Conduct Necessary to Uphold the Stewardship Principles

The Principles of Forest Stewardship are intended to be broadly interpreted. Because specific practice activities in the forest are the management prerogative of the landowner or government, forest professionals may be judged on the content and delivery of their professional work however the outcomes can be beyond their control. The following questions provide forest professionals with a method to demonstrate how their practices are consistent with the principles.

"I am confident that my professional work upholds the principles of forest stewardship when it meets the following tests."

1. Legal Test

Does my professional work comply with the applicable laws? (As per Section 1 of the *Foresters Act*)

The legal test can include questions such as the following:

- Do I know which laws apply to the practice of professional forestry?
- Can I demonstrate that I am working within my area of expertise or have sufficient mentorship?
- Does my work meet the legal requirements? (Including standards, ethics and peer review?)
- Have I recognized that applying principles of forest stewardship is a form of due diligence?

2. Knowledge and Application Test

Does my professional work consider the requisite knowledge and information to ensure good forest stewardship?

The knowledge and application test can include questions such as the following:

- Can I demonstrate that my professional work is informed by the current and available information?
- Can I demonstrate the right level of investigation and risk assessment using appropriate scales and timelines?
- Have I taken actions to ensure the quality of my professional work using peer reviews or comparison to similar work completed?

• Can I demonstrate that my professional work applies the principles of stewardship?

3. Communication Test

Does my professional work properly communicate the necessary information to show that it is consistent with the principles of stewardship?

The communication test can include questions such as the following:

- Is my professional work supported by sufficient rationale so that, where required, others can implement recommendations or prescriptions for action and meet the objectives and commitments embodied in my work?
- Have I considered with whom it is important to communicate?
- Have I explained what I did to lead to a clear understanding?
- Is my professional signature and seal on professional documents? Where no professional documents exist, is there a professional record of work sufficiently clear to provide professional assurance?
- Is there sufficient documentation and verbal direction for the implementation and results of my professional work?

4. Outcomes & Balance Test

Do I use a reasonable and balanced approach in my professional work to ensure good forest stewardship?

The outcomes and balance test can include questions such as the following:

- Does my professional work incorporate a clear analysis of the range of practical options?
- Have I addressed, to an appropriate level, the assumptions, contrasts, and context of my professional work?
- Does my professional work incorporate my recommendations?
- Have I addressed appropriate reporting on progress towards achieving the landowners' goals for resource management?

Glossary of Terms

Advocate: (Advocacy) is a political process by an individual or a large group which normally aims to influence public policy and resource allocation decisions within political, economic, and social systems and institutions. It may be motivated from moral, ethical or faith principles or simply to protect an asset of interest. Advocacy can include many activities that a person or organization undertakes including media campaigns, public speaking, commissioning and publishing research or polls.

Biological diversity (biodiversity): The variability among living organisms from all sources, including, without limiting the generality of the foregoing, terrestrial and marine and other aquatic ecosystems, and the ecological complexes of which they form a part and includes the diversity within and between species and of ecosystems.³

Ecosystem: A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.⁴

Forest Management: The planning and implementation of sustainable production of forest crops and other forest resources and uses. Key decisions include land allocation to different uses or combination of uses, silvicultural method and practices, intensity of management, timber harvest scheduling, and environmental protection. Modern forest management usually involves the production of multiple services of value to the owner or to society. Determining the best mix of services requires technical information on trade-offs between the different outputs, costs and values, and pertinent legal constraints.⁵

Forest Resources: The tangible and non-tangible components of the forest ecosystem which humans may use or consume, including trees, forest plants, herbs, mushrooms, berries, wildlife, scenic views, old growth, etc. Forest resources may be harvested, maintained, enhanced or protected for current or future use.

Forest Stewardship: Forest Stewardship is the responsible use of forest resources based on the application of an ecological understanding at the stand, forest and landscape levels, and based upon an ethical responsibility to the land and people.

Principles: Important underlying laws, similar to standards, rules, beliefs, or tenets – also called 'enduring truths.'

³ As defined in the Canadian Environmental Protection Act, 1999

⁴ As defined in the Canadian Environmental Protection Act, 1999

⁵ McGraw-Hill Concise Encyclopedia of Environmental Science.

Resilience: The persistence of natural systems in the face of changes in ecosystem variables due to natural or anthropogenic causes; the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedback.⁶

Stewardship: Stewardship specific to the forest profession is used in the *Foresters Act* as indicated above, and is described in ABCFP Bylaws 11 and 12.

Uphold: To maintain, defend or act on something.

Undermine: To subvert, weaken or ruin by degrees.

Valued Ecosystem Component (VEC): Is an environmental element of an ecosystem that is identified as having scientific, social, cultural, economic, historical, archaeological or aesthetic importance. The value of an ecosystem component may be determined on the basis of cultural ideals or scientific concern. Valued ecosystem components that have the potential to interact with project components should be included in the assessment of environmental effects.⁷

⁶ Walker, B., Holling, C. S., Carpenter, S. R., Kinzig, A. (2004). "Resilience, adaptability and transformability in social–ecological systems"

⁷ As defined by the Canadian Environmental Assessment Agency.



330-321 Water Street Vancouver, BC V6B 1B8 Tel: 604.687.8027 Fax: 604.687.3264 E-mail: info@abcfp.ca

Website: www.abcfp.ca

Ensuring BC's Forests Are In Good Hands.