

Associate Member

Proposed Scope of Practice Development

Name:

OPFA Provisional Member Number:

Proposed Scope of Practice:

Geographical Region:
(e.g. Region of Ontario, specific counties
etc.)

Forest Region :
(e.g. Great Lakes/St. Lawrence,
Carolinian, urban etc.)

Type of Land:
(e.g. Private, Conservation Authority,
Municipal, Crown)

Woodlot Size:

Time period of forest management plans:

Please identify those competency elements that are required to work within your proposed scope of practice from the list below:

STANDARD 1: FOUNDATIONAL STUDIES

1.1 Describe basic/introductory humanities, social science and scientific knowledge

- 1.11 Scientific Principles
- 1.12 Concepts of Biology, chemistry and mathematics
- 1.13 Social structures and processes
- 1.14 Economic structures and processes
- 1.15 Institutions and values of importance to society in Canada

STANDARD 2: COMMUNICATIONS, CRITICAL REASONING AND LEADERSHIP

2.1 Communicate effectively with a wide variety of audiences regarding forest resource issues

- 2.11 Proper concepts and terminology
- 2.12 Clear and persuasive arguments
- 2.13 Effective listening and reading comprehension skills
- 2.14 Cultural and social sensitivity
- 2.15 Formal written report(s)
- 2.16 Formal presentation(s) (oral and visual media)
- 2.17 Other forms of communication (including social media)

2.2 Apply critical reasoning

- 2.21 Relevant background information and documents
- 2.22 Logical arguments and development of rationales
- 2.23 Appropriate supporting documentation
- 2.24 Role of external expertise
- 2.25 Professional judgment
- 2.26 Processes to balance objectives

2.3 Use leadership skills in collaborative decision making

- 2.31 Leadership styles and their application
- 2.32 Effective team participation and leadership
- 2.33 Approaches to collaborative decision making
- 2.34 Conflict resolution skills

STANDARD 3: PROFESSIONALISM AND ETHICS

Required for all applicants

3.1 Identify the functions of professional regulatory bodies

- 3.11 Structure and functions of regulated professions in Canada
- 3.12 Relations amongst professions
- 3.13 Criteria for entry into a profession, and quality assurance standards
- 3.14 Roles of codes of conduct/ethics and standards of practice
- 3.15 Complaints and discipline processes

3.2 Articulate the duties and obligations of professionals

- 3.21 Scope of practice
- 3.22 Standards of practice
- 3.23 Codes of conduct/ethics
- 3.24 Service to the public, profession, employer and resource
- 3.25 Professional practice documentation
- 3.26 Conflict of interest
- 3.27 Commitment to maintain competency
- 3.28 Personal professional competence and role of outside expertise
- 3.29 Health and safety considerations

STANDARD 4: TREES AND SHRUBS

4.1 Identify trees and other plants and describe their growth characteristics

- 4.11 Tree and other plant recognition (regional context), including the use of identification keys
- 4.12 Plant anatomy, morphology and physiology
- 4.13 Tree genetics, silvics and life cycle
- 4.14 Plant and tree autecology
- 4.15 Plant and tree synecology

4.2 Describe tree attributes and their relationship to forest values.

- 4.21 Attributes - size, form, age, health, quality, etc.
- 4.22 Factors affecting tree attributes
- 4.23 Tree values (wildlife habitat, shade, wood fibre, air quality, etc.)

4.3 Explain past, current and possible future stand conditions and the processes that lead to them

- 4.31 Stand origin and structure (species composition, size distributions, age and spatial arrangements)
- 4.32 Forest soil properties and influences on stand origin and development
- 4.33 Stand values (wildlife habitat, wood fibre, water management, recreation, etc.)
- 4.34 Stand dynamics
- 4.35 Biotic and abiotic agents, including climate, affecting stand dynamics
- 4.36 Silviculture and silvicultural prescriptions

STANDARD 5: FORESTED LANDSCAPES

5.1 Identify the components, characteristics and processes in forested ecosystems and how they interact

- 5.11 Concepts and principles of landscape-level ecology
- 5.12 Forest ecosystem components and connectivity
- 5.13 Concepts and measures of diversity including spatial and temporal diversity
- 5.14 Forest ecosystem function and dynamics (e.g. carbon capture and storage, forest hydrology, forest nutrient cycling, fish and wildlife)

5.2 Apply ecological classification systems in a regional context

- 5.21 Principles of forest ecological classification systems
- 5.22 Forest soil classification
- 5.23 Forest climatology

5.3 Apply knowledge of the influences and interactions of agents of change in the management of forested landscapes

- 5.31 Biotic and abiotic disturbance factors (insects, disease, fire, meteorological effects, human interventions, etc.) and their effects on forest ecosystem function
- 5.32 Invasive species
- 5.33 Climate change
- 5.34 Ecosystem resilience
- 5.35 Protection and mitigation activities

STANDARD 6: INFORMATION ACQUISITION AND ANALYSIS

6.1 Employ tools for the measurement of forest resource attributes

- 6.11 Orienteering (compass, maps and Global Positioning System (GPS))
- 6.12 Field measurement tools and procedures
- 6.13 Remote sensing tools and procedures
- 6.14 Geographic Information Systems (GIS)

6.2 Design basic sampling strategies

- 6.21 Principles of basic statistics
- 6.22 Sampling design and methods and their suitability for use
- 6.23 Sampling precision, bias and effectiveness

6.3 Analyze and interpret forest resource data

- 6.31 Databases, spreadsheets and graphic presentations
- 6.32 Geographic Information Systems (GIS)
- 6.33 Forest resource inventory
- 6.34 Statistical packages

STANDARD 7: PLANNING AND ADMINISTRATION

7.1 Discuss the role of economics in planning

- 7.11 Financial and economic analysis
- 7.12 Socio-economic and market forces
- 7.13 Forest products and ecological services valuation
- 7.14 End use and value-added

7.2 Identify societal factors, governance and regulation in your work

- 7.21 Role of government forest policies (at varied levels: municipal, provincial, federal)
- 7.22 Legal and policy framework
- 7.23 Forest values (ecological, social, and economic)
- 7.24 Indigenous Peoples' Treaty and other rights, claims, traditions and interests
- 7.25 Public and stakeholder concerns and interests
- 7.26 Human resources

7.3 Employ resource planning principles

- 7.31 Principles of project planning and implementation
- 7.32 Criteria, indicators, and measures
- 7.33 Principles of adaptive management
- 7.34 Forest certification schemes

Please select which one of the following Standard 8 areas of practice is most relevant to your proposed scope of practice:

You should read through the competencies and competency elements for each before making your decision

- STANDARD 8A: FOREST MANAGEMENT (FORM)
- STANDARD 8B: NATURAL RESOURCES AND ECOSYSTEM MANAGEMENT (NREM)
- STANDARD 8C: URBAN FORESTRY
- STANDARD 8D: FOREST OPERATIONS (FOPR)
- STANDARD 8E: ECOLOGICAL RESTORATION AND MANAGEMENT (ERAM)

In the following section, please identify the competency elements within your selected Standard 8 Area of Practice that are required to work within your proposed scope of practice

The other Standard 8 sections should be left blank

STANDARD 8 AREA OF INTEREST- SELECT REQUIRED COMPETENCIES WITHIN THE ONE AREA OF INTEREST (8A-8E) MOST RELEVANT FOR YOUR SCOPE OF PRACTICE

STANDARD 8A: FOREST MANAGEMENT (FORM)

8A.1 Discuss the forest management process, and its requirements and levels

- 8A.11 Components of the forest management process
- 8A.12 Purpose of forest management planning
- 8A.13 Domestic and global trends
- 8A.14 Concepts and applications of sustainability
- 8A.15 Strategic, tactical and operational planning levels

8A.2 Design stand and forest-level plans

- 8A.21 Legal and policy requirements
- 8A.22 Stakeholder consultation
- 8A.23 Forest values (ecological, social, and economic)
- 8A.24 Current stand and forest-level conditions
- 8A.25 Management objectives and constraints
- 8A.26 Stand-level actions (silviculture) and forest-level scenarios to attain different management objectives
- 8A.27 Stand-level projection models
- 8A.28 Landscape/forest-level projection models
- 8A.29 Performance measurement criteria and methodologies

8A.3 Develop operational plans

- 8A.31 Business and operational objectives and constraints
- 8A.32 Resources required
- 8A.33 Basic operational planning including forest access, silviculture, protection, harvesting, monitoring, etc.

STANDARD 8 AREA OF INTEREST- SELECT REQUIRED COMPETENCIES WITHIN THE ONE AREA OF INTEREST (8A-8E) MOST RELEVANT FOR YOUR SCOPE OF PRACTICE

STANDARD 8B: NATURAL RESOURCES AND ECOSYSTEM MANAGEMENT (NREM)

8B.1 Discuss the landscape management process, requirements and levels

- 8B.11 Components of the landscape management process
- 8B.12 Purpose of landscape-level management planning
- 8B.13 Domestic and global trends
- 8B.14 Concept and applications of sustainability
- 8B.15 Strategic, tactical and operational planning levels

8B.2 Design environmental/landscape-level plans

- 8B.21 Legal and policy requirements
- 8B.22 Stakeholder consultation
- 8B.23 Landscape values (ecological, social, and economic)
- 8B.24 Current landscape conditions
- 8B.25 Management objectives and constraints
- 8B.26 Landscape/forest-level projection models
- 8B.27 Actions (silviculture) used to attain different management objectives
- 8B.28 Performance measurement criteria and methodologies

8B.3 Develop operational plans

- 8B.31 Business and operational objectives and constraints
- 8B.32 Resources required
- 8B.33 Basic operational planning including access, silviculture, protection, use management, etc.

STANDARD 8 AREA OF INTEREST- SELECT REQUIRED COMPETENCIES WITHIN THE ONE AREA OF INTEREST (8A-8E) MOST RELEVANT FOR YOUR SCOPE OF PRACTICE

STANDARD 8C: URBAN FORESTRY

8C.1 Identify the variety of values and interests in an urban and peri-urban forest

- 8C.11 Ecological, social and economic benefits
- 8C.12 Green infrastructure systems, storm water attenuation, natural hydrologic cycles in built environments, moderation of local climate and urban heat, etc.
- 8C.13 Interests, rights and responsibilities of private landowners, local residents, municipal governments, ENGOs, community groups, local residents, etc.
- 8C.14 Multicultural values and considerations
- 8C.15 Species at Risk and their habitats
- 8C.16 The process of extensive urbanization (“development”) and intensive urbanization (“infilling”)

8C.2 Communicate urban forest strategic and operational planning principles

- 8C.21 Components of urban forest planning and landscape design
- 8C.22 Principles of urban planning including the various levels of planning documents (site plan approval, plans of subdivision, etc.)
- 8C.23 Purpose of urban forest planning
- 8C.24 Domestic and global trends
- 8C.25 Urban forest health issues
- 8C.26 Management objectives: types, setting and attainment
- 8C.27 Role and application of monitoring in urban forestry
- 8C.28 Arboriculture practices on the urban landscape (including selection and placement of trees, proper maintenance, hazard trees and risk assessment factors, determining and managing tree values)
- 8C.29 Tools (models and methods) used in urban forestry

8C.3 Develop a resource plan for an urban or peri-urban forest

- 8C.31 Legal and policy requirements
- 8C.32 Tree/landscape inventory
- 8C.33 Stakeholder consultation
- 8C.34 Ecological, social and economic values
- 8C.35 Management objectives and constraints
- 8C.36 Actions (silviculture) used to attain different management objectives
- 8C.37 Performance measurement criteria and methodologies

STANDARD 8 AREA OF INTEREST- SELECT REQUIRED COMPETENCIES WITHIN THE ONE AREA OF INTEREST (8A-8E) MOST RELEVANT FOR YOUR SCOPE OF PRACTICE

STANDARD 8D: FOREST OPERATIONS (FOPR)

8D.1 Discuss the forest management process, and its requirements and levels

- 8D.11 Components of the forest management process
- 8D.12 Purpose of forest management planning
- 8D.13 Domestic and global trends
- 8D.14 Concepts and applications of sustainability
- 8D.15 Strategic, tactical and operational planning levels

8D.2 Discuss purpose and components of forest planning

- 8D.21 Forest values (ecological, social, and economic)
- 8D.22 Legal and policy requirements
- 8D.23 Current stand and forest-level conditions
- 8D.24 Management objectives and constraints
- 8D.25 Stand-level actions (silviculture) and forest-level scenarios to attain different management objectives
- 8D.26 Stand-level projection models
- 8D.27 Landscape/forest-level projection models
- 8D.28 Harvest methods for variable terrain and timber types

8D.3 Design forest road systems and road crossing implementation strategies

- 8D.31 Access management and planning
- 8D.32 Legal requirements for access to public highways and wetland, stream and river crossings
- 8D.33 Road design and crossing design (bridges, culverts)
- 8D.34 Operational constraints of road and crossing design
- 8D.35 Economics of road and crossing design
- 8D.36 Road and crossing design safety
- 8D.37 Options for road and crossing design under a variety of terrain and soil conditions including unstable terrain
- 8D.38 Options for road and crossing inspections

8D.4 Develop operational plans

- 8D.41 Stakeholder consultation
- 8D.42 Operational objectives
- 8D.43 Economics of timber extraction
- 8D.44 Harvest strategies, roads, crossings, production and delivery schedules (may include stand establishment and tending)
- 8D.45 Safety considerations for workers and the public
- 8D.46 Performance measurement criteria and methodologies

STANDARD 8 AREA OF INTEREST- SELECT REQUIRED COMPETENCIES WITHIN THE ONE AREA OF INTEREST (8A-8E) MOST RELEVANT FOR YOUR SCOPE OF PRACTICE

STANDARD 8E: ECOLOGICAL RESTORATION AND MANAGEMENT (ERAM)

8E.1 Discuss the principles of maintaining or building soils and related management

- 8E.11 Principles for management and/or mitigation of industrial soil disturbance
- 8E.12 Principles and management techniques for remediation of soil ecosystem contaminants
- 8E.13 Impact of substrates, topography and vegetation on pedogenic development
- 8E.14 Management considerations for soil fertility and soil water across a range of soil conditions

8E.2 Identify the principles of restoration of functioning ecosystems

- 8E.21 Restoration ecology including the role of climate, fire, soils, water, plants, and animals and their interactions
- 8E.22 Differences between active ecosystem restoration and “natural recovery”
- 8E.23 Development of species assemblies, the impact of agronomic species, exotic species

8E.3 Articulate ecological restoration planning, and its requirements and levels

- 8E.31 Legal and policy framework
- 8E.32 Domestic and global trends
- 8E.33 Purpose of restoration/reclamation planning
- 8E.34 Components of restoration/reclamation
- 8E.35 Strategic, tactical and operational planning levels

8E.4 Develop restoration plans

- 8E.41 Stakeholder consultation
- 8E.42 Management objectives and constraints
- 8E.43 Actions used to attain different management objectives
- 8E.44 Resources required
- 8E.45 Basic restoration planning including access, silviculture, protection, monitoring, etc.
- 8E.46 Performance measurement criteria and methodologies