

Standard 8E: Ecological Restoration and Management (ERAM)

Principle: Ecological restoration and management plans the recovery of functional forest ecosystems after severe disturbances with an emphasis on soil recovery, accelerated succession and recovery of ecosystem processes to restore ecological values and social and economic uses of these forests.

Demonstrable competencies and descriptions

As applicable, a candidate for certification shall provide evidence of the ability to:

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

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

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

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

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

- Legal and policy framework
- Domestic and global trends
- Purpose of restoration/reclamation planning
- Components of restoration/reclamation
- Strategic, tactical and operational planning levels

8E.4 Develop restoration plans.

- Stakeholder consultation
- Management objectives and constraints

- Actions used to attain different management objectives
- Resources required
- Basic restoration planning including access, silviculture, protection, monitoring, etc.
- Performance measurement criteria and methodologies