

Operational Management

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Managing operations involves a suite of skills that relate to overseeing people and work site conditions to ensure that projects are completed safely, competently, and on time. Forest technologists must effectively implement management plans, manage operational practices, and assist in making decisions that ensure operations are efficient and effective.

Demonstrable Competencies

Measures

A. Conduct operations ¹

1. Navigate in the field
2. Operate digital Geographic Information System (GIS) technologies
3. Operate Global Navigation Satellite Systems (GNSS)-enabled technologies
4. Use forestry tools and equipment ²
5. Mark locations, boundaries, and features
6. Implement wildfire management plans, and procedures ³
7. Implement a silviculture system ⁴
8. Implement control measures for forest pests, diseases, and invasive species
9. Construct thematic maps using a variety of data sources
10. Implement watershed protection and restoration protocols to ensure hydrological function
11. Employ appropriate scale of mapping, remote sensing, and survey systems ⁵

B. Develop operational plans

1. Plan workflows, scheduling, and tasks
2. Estimate productivity
3. Calculate financial projections
4. Determine human resources⁶
5. Determine relevant data, information, equipment, and materials
6. Determine desired outcome(s) and objective(s)
7. Integrate multiple values and uses

Notes:

1. The term operations is not restricted to referencing industrial forestry.
2. Includes operating wildfire tools and equipment; maintaining tools and equipment; operating tree measurement tools; operating modes of field transportation. Can include operating power saws.
3. May include suppression and/or prescribed burning.
4. Includes the ability to apply stand treatments based on a prior silvicultural assessment.
5. Includes the ability to describe standard procedures for monitoring, measuring, and collecting data.
6. Includes the ability to identify the people needed to do a job and their skillsets.

Operational Management continued

Demonstrable Competencies

Measures

C. Manage operations

1. Monitor operational conditions and processes
2. Supervise people
3. Manage workflows, scheduling, and tasks
4. Prepare required resources ¹

D. Prescribe appropriate activities and methods

1. Recommend silvicultural treatments, methods, and systems ²
2. Recommend operational harvesting activities, methods, and systems ²
3. Recommend road and crossing locations, maintenance, and deactivation activities ²
4. Recommend wildfire prevention, containment methods and activities ^{3 & 4}
5. Recommend reclamation and rehabilitation activities on forested landbase
6. Protect significant cultural and archeological features
7. Maintain edible and medicinal plant communities as directed by Indigenous communities

Notes:

1. Tracking and timing operations and processes.
2. May include preparation of maps and materials; forestry tools and equipment; ensuring individuals have the resources they need to work safely, etc.
3. Includes protection of environmentally and ecologically sensitive features.
4. Includes awareness of wildland urban interface.