In the moist coniferous forests of the Pacific Northwest, the sustainability of human communities and forest resources are intimately intertwined. Maintaining both multi-faceted, biodiverse forest ecosystems and thriving forest-based human communities is challenging, particularly as climate change and other stressors add new dimensions to the complexity of managing forests for multiple goals. This book describes the factors that make human-forest ecosystems dynamic and heterogeneous, synthesizes new knowledge from multiple scientific disciplines, and integrates findings to show how management of both natural and human resources could be strengthened. The lessons learned from this system are applicable to the management of coupled nature-human ecosystems well beyond the Pacific Northwest.

Key Topics

1) Moist forests provide highly valued ecosystem services including native species, clean water, and a variety of wood products.

2) Impoverished rural communities result from reliance on uniform, historic methods of harvesting and using wood products.

3) We continue to learn about forest resources, and their heterogeneity and management, hence iterative, learning-based adaptive approaches are needed to improve management for sustainability goals.

4) With all people, all species, and all stressors in mind, managing for sustainability could restructure forest management using an all-lands, integrated approach.

5) Multi-stakeholder collaborative-group forest governance shows promise for managing multiple resources across land ownerships at large spatial scales, but trust among partners is complex and will need to be addressed to ensure success.

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Spatial Scope: The book addresses moist coniferous forests across all lands from California to Alaska. Many examples come from western Oregon and Washington, and a few come from beyond the region.

Temporal Scope: Initial chapters frame tribal tending practices and the historical framework of timber industry development for the region. Later chapters focus on trends, new knowledge, and key topics for future consideration.

Conceptual Scope: There are 20 independent chapters written by 59 contributing authors in an easy-to-read, condensed, small-book format (~300 pages) exploring concepts such as the human-forest ecosystem, multistate watersheds and landscapes, and all-lands integration. A broad range of focal topics include socioeconomic patterns, landownerships, adaptive management, collaborative-group governance, and emerging research advances in silviculture, long-term productivity, carbon, biodiversity, aquatic-riparian systems, watershed and landscape ecology, climate change, novel forest products, and trust.

Audience: The Island Press book audience is broad—forest managers, ecologists, conservationists, researchers, policy makers, educators, and students both within and beyond the Northwest. Among forest managers, our succinct synthesis of lessons learned will be of interest to natural resource professionals in government agencies, industrial and private forest landowners, and non-government organizations. For researchers and educators, the book is a useful synthesis of current scientific knowledge as a springboard for discussion and further studies and could serve as a primary text for advanced undergraduate and graduate classes. The book is written in an “interesting textbook” style with inter-chapter continuity, free of jargon and highly technical terms, and targeted toward collegiate or college-educated generalists.

Selected Take-home Messages: The current forest-management trajectory in this region has some undesirable results, including both socioeconomic declines and losses of sensitive fish and wildlife populations. All-lands integration can address the sustainability of resilient ecosystem services. Managing for a greater variety of conditions with locally unpredictable dynamics is important to long-term forest planning. Management of all lands, all species, and all stressors will require an integrated adaptive-management framework with continued learning as a core strategy to assess combined goals of socioeconomic and ecological sustainability.

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