

Tools and Techniques to Manage the Urban Forest

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Outline of Talk

- ★ Role of urban forestry in the College of Forest Resources
- ★ Context for today's symposium
- ★ Introduce King County Executive Ron Sims, our lead-off speaker

College Mission

- ★ Study and investigate the functionality and sustainability of natural resource systems
- ★ Natural and managed environments
- ★ Interdisciplinary approach involving multiple scales within urban and wildland landscapes

College Vision

- ★ To be a world-class internationally recognized source of knowledge relevant to environmental and natural resource issues

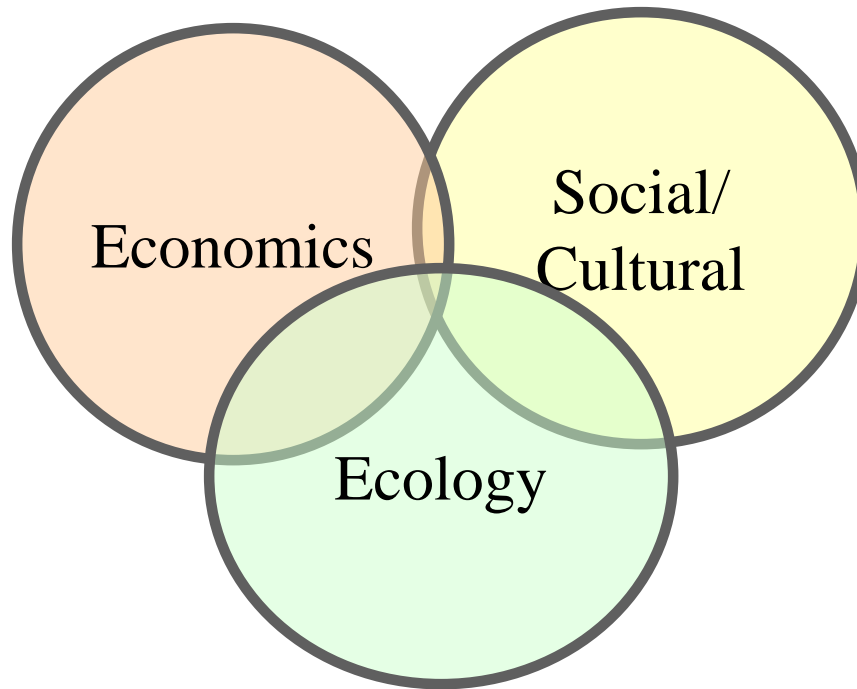
Strategic College Themes

- ★ Land and ecosystem management in an urbanizing world
 - *conflicts and tradeoffs among competing human and natural resource values in the growing and urbanizing global population*
- ★ Sustainable forest enterprises
 - *land and water resource production, use, and management, with attention to the material and social impacts of sustainable practices*

Sustainability is the Cornerstone

- ★ Sustainable forests : managed and natural
 - Plantations, parks, reserves, watersheds
- ★ Sustainable forest enterprises
 - Paper and saw mills, precision forestry technologies, tourism, recycling, nurseries, non-timber forest products
- ★ Sustainable urban environments
 - Urban forestry, horticulture, restoration ecology, water, wildlife, public gardens, green belts, open spaces

Sustainability Occurs at the Intersection



Seeking Sustainability Is Complex

- ★ Many stakeholders
- ★ Multiple and conflicting goals (trade offs)
- ★ Uncertainty
 - future societal needs
 - future state of ecosystem and unknown environmental factors
 - lack of complete understanding of ecosystem behavior and reaction to natural or man caused perturbations

Seeking Sustainability

- ★ The use of science is absolutely necessary to find the proper balance but is by no means sufficient
- ★ Value preferences expressed through the economic, political, and legal systems will largely determine the ultimate balance
- ★ Requires that we adopt an integrated, systematic, holistic, adaptive approach that simultaneously considers all values

Urban Forestry Issues

- ★ Possess all of these varied characteristics
- ★ Focus attention on the interaction between nature and humans and stress key principles and processes that explain the behavior and interaction of biotic and social systems along gradients from urban to suburban to wild land ecosystems
- ★ Closely align with the College's historic strengths in biology, economic, and social sciences

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Urban Forestry

- ★ What is it?

- The art, science and technology of managing trees and forest resources in and around urban community ecosystems for the physiological, sociological, economic and aesthetic benefits trees provide to society

Source: The Dictionary of Forestry, Society of American Foresters



Urban & Community Forests

* What are they?

- the aggregate of all vegetation and green spaces within communities that provide benefits vital to enriching the quality of life
- trees and related natural resources in populated areas, from the inner city to the developing urban fringe and within small communities

Sources: Center for Urban Forest Research, USDA PSW Research Station and NUCFAC

Urban Forests

- ★ What benefits do they provide?
 - Lower building energy costs through shading
 - Clean air
 - Help make communities fire-wise
 - Control water run off
 - Improve property valuation

Source: Center for Urban Forest Research, USDA PSW Research Station

Urban Forests

- ★ Why are people interested?
 - We are an urban population
 - We seek a higher quality of life in our local environment
 - We are aware of the loss of urban green spaces
 - We recognize the soothing qualities of urban green spaces
 - We recognize the benefits of urban forests

Urban Forests

- ★ In 1998, American Forests conducted a regional ecosystem analysis of the Puget Sound Metropolitan Area
- ★ The study reported areas with high vegetation and tree canopy cover decreased by 37% from 1972 to 1996
- ★ In the heavily urbanized areas of Puget Sound, the comparable loss was 51%
- ★ This has lead to more storm water run off and higher levels of air pollution

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First Speaker

- ★ Ron Sims, King County Executive
- ★ Planning the Urban Forest for the 21st Century