

# College of Forest Resources Strategic Vision

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# Objectives of Presentation

- ◆ Review progress of College transformation
- ◆ Present future directions

# Mission Statement

The College of Forest Resources is dedicated to generating and disseminating knowledge for the stewardship of natural and managed environments and the sustainable use of their products and services through teaching, research, and professional and public outreach.

# Vision Statement

The College of Forest Resources will be a world-class internationally recognized source of knowledge relevant to environmental and natural resource issues.

# World Class Vision Implies

- ◆ High quality (faculty, staff, students, facilities, programs, graduates)
- ◆ High impact (at UW and in our external community)
- ◆ Sufficient resources (facilities, space, funds)
- ◆ Criteria developed to measure success

# Programmatic Niche

Study and investigate key principles and processes that explain the behavior and interaction of biotic and social systems along gradients from highly to minimally impacted terrestrial ecosystems — gives us a unique interdisciplinary base from which to play a leadership role in developing the science of sustainability – both on and off campus.

# Strategic 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 Our Integrating Goal

- ◆ Sustainable forestry in managed and natural forests
  - Plantations, parks, reserves, watersheds
- ◆ Sustainable urban environments
  - Urban forestry, horticulture, public gardens, restoration ecology, water, wildlife
- ◆ Sustainable forest enterprises
  - Paper mills, precision forestry technologies, tourism, recycling, wood products, non-timber products



# Our Academic Programs

- ◆ Encompass the functionality and sustainability of complex natural resource and environmental systems featuring
  - Interdisciplinarity
  - Integration
  - Collaboration (on and off campus)
  - Team approach
  - Multiple scales
  - Gradient from urban to rural systems

# Our Research Programs

- ◆ Emphasize coupled human and bio-physical systems
- ◆ Support development of a new science of sustainability to integrate ecological and economic approaches in a socially acceptable manner
- ◆ Develop technology; discover new scientific knowledge; and transfer knowledge to the user community

# Research Areas

- ◆ Ecosystem Structure and Function
  - Productivity, health, processes, management
- ◆ Social and Human Systems
  - Valuation, system integration, natural/human interactions
- ◆ Technology
  - Remote sensing, bio-energy, sustainable products, information technology, bio-technology

# Future Directions

- ◆ New faculty hires
  - Opportunity to transform the College
  - Identify new science/technology so we can ‘leap frog’ into new areas with these hires
  - Nine new positions -- four returned to Provost as retirements occur
  - All positions must promote and contribute to our vision of sustainability

# Future Directions

- ◆ Refine future research agenda
  - Current initiatives in bio-energy and products, forest stand development, etc.
  - Identify collaborators on and off campus
  - Identity funding needs and sources

# Future Directions

- ◆ Identify future facility needs
  - Link laboratory upgrades with new faculty hires
  - Adequate interactive teaching facilities
  - NW Environmental Forum
  - Pack Forest upgrades with CSF
  - New natural resources sciences building

# Curriculum Transformation

- ◆ Driven by both budget and programmatic needs:

- access

- efficiency

- enrollment targets and credit hours

- flexibility

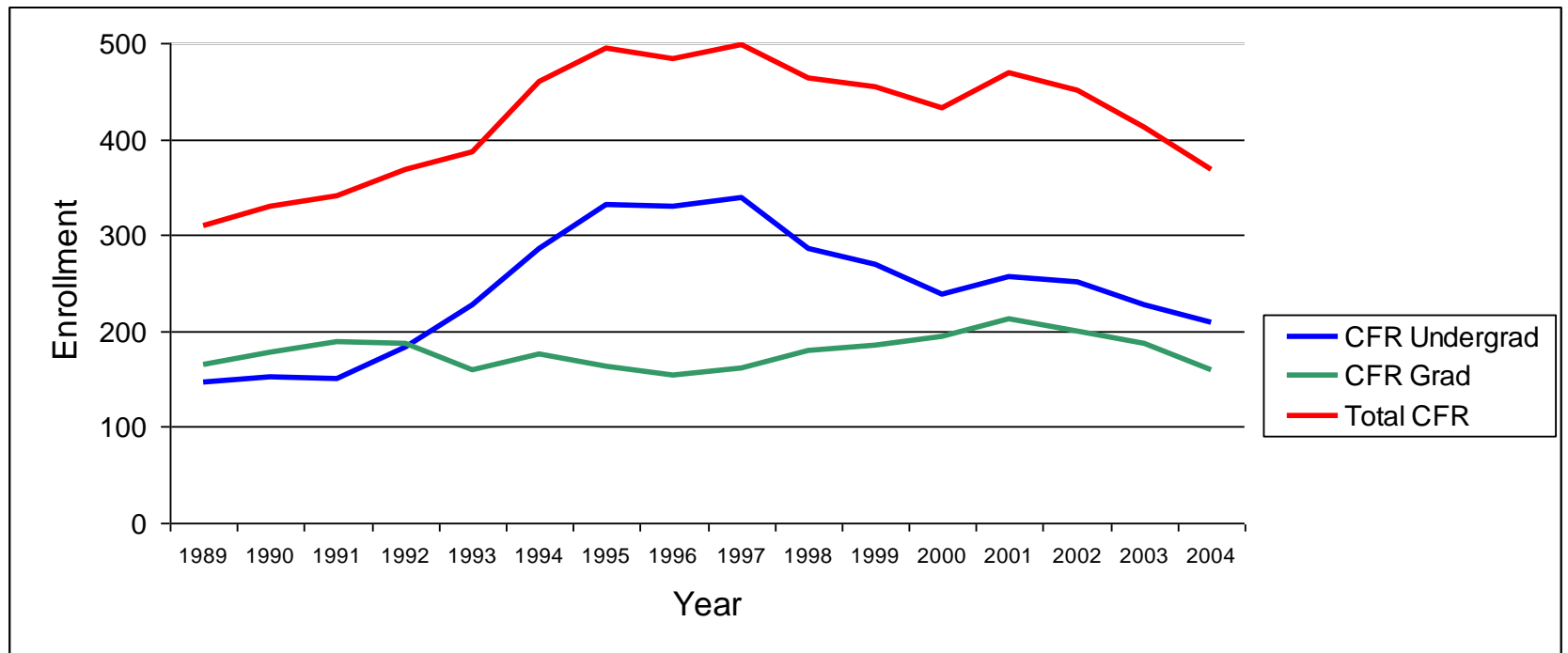
- market needs

- integration and links to UW units

} BUDGET

} PROGRAM

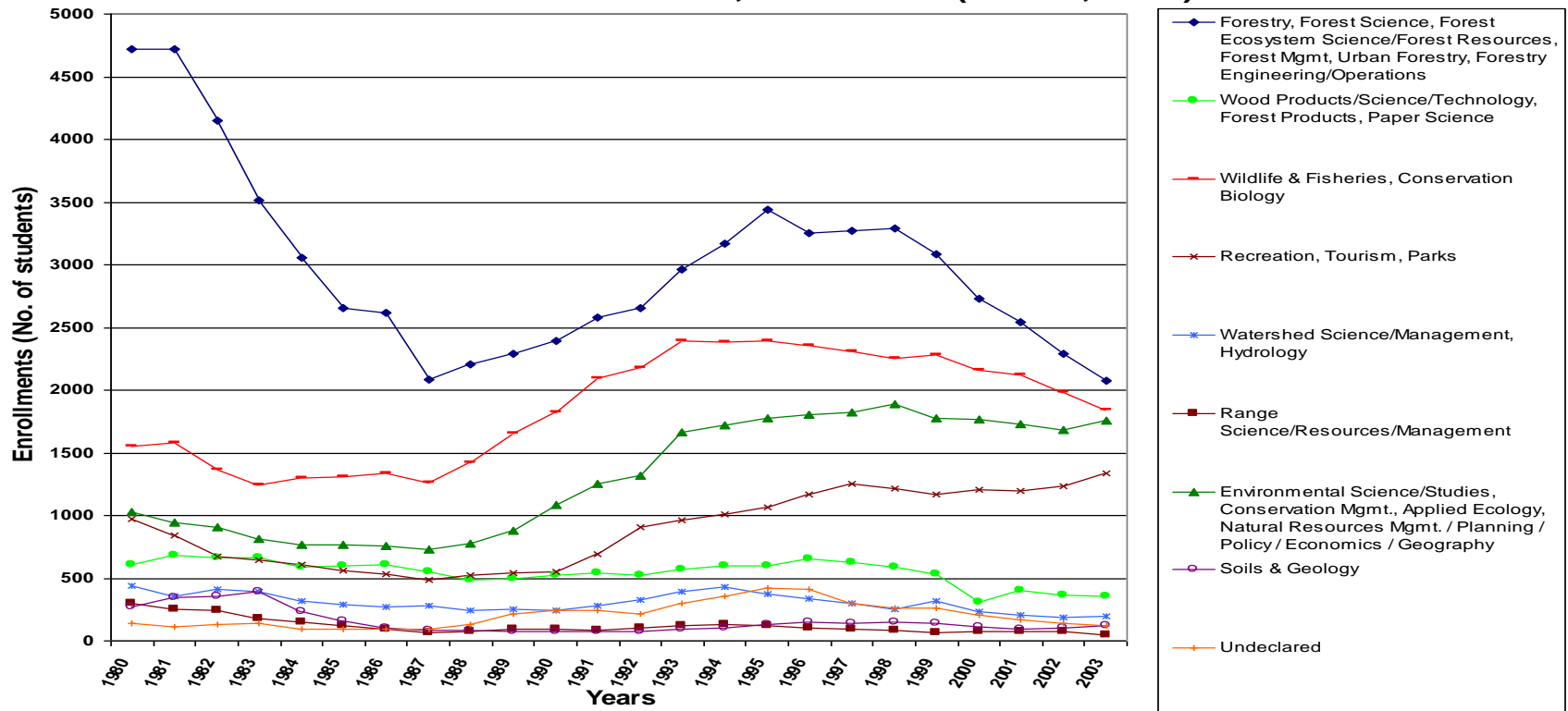
# College Enrollment Trends





# Undergraduate Enrollments

Undergraduate Enrollments in Natural Resources by Field of Study for NAPFSC Institutions, 1980-2003\* (Sharik, 2004)



# Undergraduate Curriculum

## ◆ Environmental Science and Resource Management:

- Written communications – 12 cr
- Visual, literary, performing arts – 10 cr
- Quantitative reasoning – 20 cr
- Biology, soils, chemistry – 24 cr
- Total general education – 66 cr

# Undergraduate Curriculum

- ◆ Environmental Science and Resource Management:
  - Major requirements
    - Core - 20 cr
    - Optional pathway – 35 cr
  - Free electives – 59 cr
  - Total credits -  $114 \text{ cr} + 66 = 180 \text{ cr}$

# Undergraduate Curriculum

- ◆ New integrated undergraduate curriculum in Environmental Science and Resource Management:
  - retains and improves our historic strengths in forestry and horticulture
  - improves flexibility in the curriculum allowing students to tailor their studies via pathways
  - is ‘transfer-student friendly’
  - improves integration, access and efficiency
  - provides opportunity to obtain both an MFR and BSF in five years

# Undergraduate Curriculum

- ◆ New integrated undergraduate curriculum in Environmental Science and Resource Management
  - focuses specialization at the graduate-level
  - has potential to attract more students into the College
  - promotes sustainability (triple bottom line)
  - fosters team approach to natural resource education through interdisciplinary courses

# Graduate Program Efficiency

- ◆ Will offer professional masters programs in forestry, urban horticulture, etc., to provide in depth technical knowledge (accredited where appropriate) to satisfy employer needs
- ◆ MFR graduate programs linked to our four year BSF undergraduate programs provide efficiency and flexibility
- ◆ Consolidate learned degree (MS and PhD) programs to gain efficiency and integration

# Future Directions

- ◆ Assess and revise (as needed) undergraduate and graduate curricula
  - Develop recruitment strategy
  - Diversify student population
  - Develop mentoring program to ensure student success



The End