



**University of Idaho
Forest Utilization Research and
Outreach (FUR)**

STRATEGIC PLAN

2017-2021

Forest Utilization Research and Outreach (FUR)

MISSION

The Forest Utilization Research and Outreach (FUR) program is located in the College of Natural Resources at The University of Idaho. Its purpose is to increase the productivity of Idaho's forests and rangelands by developing, analyzing, and demonstrating methods to improve land management and related problems such as post-wildfire rehabilitation using state-of-the-art forest and rangeland regeneration and restoration techniques. Other focal areas include sustainable forest harvesting and livestock grazing practices, including air and water quality protection, as well as improved nursery management practices, increased wood use, and enhanced wood utilization technologies for bioenergy and bioproducts. The program also assesses forest products markets and opportunities for expansion, the economic impacts of forest and rangeland management activities, and the importance of resource-based industries to communities and the state's economic development. In addition the Policy Analysis Group follows a legislative mandate to provide unbiased factual and timely information on natural resources issues facing Idaho's decision makers. Through collaboration and consultation FUR programs promote the application of science and technology to support sustainable lifestyles and civic infrastructures of Idaho's communities in an increasingly interdependent and competitive global setting.

OUTCOME-BASED VISION STATEMENT

The scholarly, creative, and educational activities related to and supported by Forest Utilization Research and Outreach (FUR) programs will lead to improved capabilities in Idaho's workforce to address critical natural resource issues by producing and applying new knowledge and developing leaders for land management organizations concerned with sustainable forest and rangeland management, including fire science and management, and a full spectrum of forest and rangeland ecosystem services and products. This work will be shaped by a passion to integrate scientific knowledge with natural resource management practices. All FUR programs will promote collaborative learning partnerships across organizational boundaries such as governments and private sector enterprises, as well as landowner and non-governmental organizations with interests in sustainable forest and rangeland management. In addition, FUR programs will catalyze entrepreneurial innovation that will enhance stewardship of Idaho's forest and rangelands, natural resources, and environmental quality.

GOALS & OBJECTIVES

Goal 1: Scholarship and Creativity

Achieve excellence in scholarship and creative activity through an institutional culture that values and promotes strong academic areas and interdisciplinary collaboration among them.

Objective A: Promote an environment that increases faculty, student, and constituency engagement in disciplinary and interdisciplinary scholarship.

Strategies:

1. Upgrade and develop university human resource competencies (faculty, staff and students) to strengthen disciplinary and interdisciplinary scholarship that advances the college's strategic themes and land-grant mission directly linked to FUR.
2. Establish, renew, remodel, and reallocate facilities to encourage funded collaborative disciplinary and interdisciplinary inquiry in alignment with FUR programs in forest and nursery management as well as the Rangeland Center and Policy Analysis Group.

Performance Measures:

- Number of CNR faculty, staff, students and constituency groups involved in FUR-related scholarship or capacity building activities.
- Non-FUR funding leveraged by FUR-funded indoor and outdoor laboratories, field facilities, and teaching, research and outreach programs.

Benchmarks:

Numbers of CNR faculty, staff, students and constituency groups set at 2016 level with an ongoing objective for them to stay the same or increase based on the investment level in this aspect of FUR programming.¹

Start with a 3:1 return on investment ratio meaning every one dollar of FUR state funding leverages at least three non-FUR funded dollars from other sources.¹

Objective B: Emphasize scholarly and creative outputs that reflect our research-intensive and land-grant missions, the university and college's strategic themes, and stakeholder needs, especially when they directly support our academic programming in natural resources.

Strategies:

1. Enhance scholarly modes of discovery, application and integration that address issues of importance to the citizens of Idaho that improve forest and

¹ This is a new benchmark a baseline is being set using 2016 levels, ongoing growth will be based on baseline analysis

rangeland productivity, regeneration, and rehabilitation, including nursery management practices, fire science and management, and a full spectrum of ecosystem services and products, including environmental quality, and their economic importance.

2. Create new products, technologies, protocols and processes useful to private sector natural resource businesses — such as timber harvesting and processing operations, forest and rangeland regeneration and rehabilitation firms, working livestock ranches, as well as governmental and non-governmental enterprises and operating units.
3. Conduct research and do unbiased policy analyses to aid decision-makers and citizens understanding of natural resource and land use policy issues.

Performance Measure:

- An accounting of products (e.g., seedlings produced, research reports, refereed journal articles) and services (e.g., protocols for new species shared with stakeholders, policy education programs and materials provided, accessible data bases or market models) created and delivered including an identification of those which are recognized and given credibility by external reviewers through licensing, patenting, publishing in refereed journals, etc.
- Number of external stakeholders (non-university entities) that request information and/or consultancies on FUR-funded protocols for technologies or knowledge related to programs such as regeneration of native plants and seedlings, fire science, timber harvesting, wood residue utilization, livestock grazing, forest and rangeland restoration, market opportunities, economic impact, etc.

Benchmark:

Numbers and types of products and services delivered and stakeholders serviced as of 2014-2016 average levels with an ongoing objective for benchmarks to stay the same or increase based on investment levels in this aspect of FUR programming during the defined period.²

Goal 2: Outreach and Engagement

Engage with the public, private and non-profit sectors through mutually beneficial partnerships that enhance teaching, learning, discovery, and creativity.

Objective A: Build upon, strengthen, and connect the College of Natural Resources with other parts of the University to engage in mutually beneficial partnerships with stakeholders to address areas targeted in FUR.

² Based on an analysis of 2014-2016 levels with sustained or increased performance moving forward.

Strategies:

1. Enhance the capacity of the College of Natural Resources to engage with communities by involving faculty and students in programs relevant to local and regional issues associated with forest and rangeland management, maintenance of environmental quality, and economic development.
2. Engage with communities, governmental and non-governmental organizations through flexible partnerships that share resources and respond to local needs and expectations.
3. Foster key industry and business relationships that benefit entrepreneurship and social and economic development through innovation and technology transfer that will increase the productivity of Idaho's forests and rangelands while enhancing air and water quality.

Performance Measure:

Document cases:

- Communities served and resulting documentable impact;
- Governmental agencies served and resulting documentable impact;
- Non-governmental agencies and resulting documentable impact;
- Private businesses and resulting documentable impact; and
- Private landowners and resulting documentable impact.

Benchmark:

Meeting target numbers for audiences identified above as well as developing and experimenting with a scale for measuring documentable impact.³

Goal 3: Teaching and Learning

Engage students in a transformational experience of discovery, understanding, and global citizenship.

Objective A: Develop effective integrative learning activities to engage and expand student minds.

Strategies:

1. Provide undergraduate, graduate and professional students with education and research opportunities in nursery management, wood utilization technologies including bioenergy and bioproducts, forest and rangeland regeneration and restoration, fire science and management, and ecosystem services and products and their valuation.
2. Integrate educational experiences into ongoing FUR and non-FUR research programs at CNR outdoor laboratories, including the University of Idaho Experimental Forest, the Forest Nursery complex, and McCall campus.

³ Internally set standards for maintaining high quality program

3. Engage alumni and stakeholders as partners in research, learning, and outreach.

Performance Measures:

- Number and diversity (as measured by variety of academic programs impacted) of courses which use full or partially FUR funded projects, facilities or equipment to educate, undergraduate, graduate and professional students.
- Number of hits on PAG and other FUR-related web-sites, and where feasible number of documents or other products downloaded by stakeholders.

Benchmark:

Meeting or being above target numbers for the audiences and programming proposed above as per investment in a given funding cycle.⁴

KEY EXTERNAL FACTORS

The key external factors likely to affect the ability of FUR programs to fulfill the mission and goals are as follows: (1) the availability of funding from external sources to leverage state-provided FUR funding; (2) changes in human resources due to retirements or employees relocating due to better employment opportunities; (3) continued uncertainty relative to global, national and regional economic conditions; and (4) changing demand for the state and region's ecosystem services and products.

⁴ Based on internally set standards and resources available.