

Part I – Agency Profile

Agency Overview

Research mission – investigation into forestry and rangeland resource management problems, forest nursery production, and related areas. Part of the College of Natural Resources, Forest Utilization Research also includes the Rangeland Center with a legislative mandate for interdisciplinary research, education and outreach as suggested by a partner advisory council to fulfill the University's land-grant mission (Idaho Code § 38-715), and the Policy Analysis Group with a legislative mandate to provide objective data and analysis pertinent to natural resource and land-use issues as suggested by an advisory committee of Idaho's natural resource leaders (Idaho Code § 38-714).

Core Functions/Idaho Code

The duty of the Experiment Station of the University of Idaho's College of Natural Resources is to institute and conduct investigations and research into the forestry, wildlife and range problems of the lands within the state. Such problems specifically include forest and timber growing, timber products marketing, seed and nursery stock production, game and other wildlife, and forage and rangeland resources. Information resulting from cooperative investigation and research, including continuing inquiry into public policy issues pertinent to resource and land use questions of general interest to the people of Idaho, is to be published and distributed to affected industries and interests. (Idaho Code § 38-701, 38-703, 38-706, 38-707, 38-708, 38-709, 38-710, 38-711, 38-714, 38-715)

Revenue and Expenditures

Revenue	FY 2014	FY 2015	FY 2016	FY 2017
General Fund	\$667,400	\$887,100	\$1,078,800	\$1,268,400
Total	\$667,400	\$887,100	\$1,078,800	\$1,268,400
Expenditures	FY 2014	FY 2015	FY 2016	FY 2017
Personnel Costs	\$569,200	\$693,500	\$902,900	\$1,106,100
Operating Expenditures	\$93,300	\$109,300	\$129,300	\$136,900
Capital Outlay	\$4,900	\$84,300	\$46,600	\$25,400
Trustee/Benefit Payments	\$0	\$0	\$0	\$0
Total	\$667,400	\$887,100	\$1,078,800	\$1,268,400

Profile of Cases Managed and/or Key Services Provided

Cases Managed and/or Key Services Provided	FY 2014	FY 2015	FY 2016	FY 2017
Number of Private Landowners Assisted: Pitkin Forest Nursery	1550	1550	1575	1575
Number of Seedling Industry Research Projects: Pitkin Forest Nursery	3	4	3	6
Number of:				
• Research Projects:				
Experimental Forest	12	11	11	15
Policy Analysis Group	9	6	9	10
Pitkin Forest Nursery	10	12	10	11
Rangeland Center	15	19	14	21
• Teaching Projects:				
Experimental Forest	25	24	24	26
Policy Analysis Group	13	8	8	8
Pitkin Forest Nursery	5	6	6	3
Rangeland Center	9	10	13	11
• Service Projects:				
Experimental Forest	10	11	11	12
Policy Analysis Group	14	7	12	10
Pitkin Forest Nursery	12	15	13	10
Rangeland Center	13	8	9	17

FY 2017 Performance Highlights

University of Idaho Experimental Forest (UIEF)

FY17 was a productive year for the University of Idaho Experimental Forest (UIEF), as the College continues to expand use of the UIEF to its fullest potential as a working forest serving the University land-grant mission. This year UIEF included active student learning in timber sales and logging activities, inventoried over 1500 acres, and pre-commercially thinned over 300 acres. FY17 was also a year that showed the great promise of the integration between FUR program areas as 80,000 seedlings grown by students at the Pitkin Forest Nursery were planted following prescribed burning and other site prep activities on over 200 acres. Along with this student-led management, faculty, graduate students, research staff and collaborators from as far as Italy are implementing dozens of new research projects, including 5 large-scale real-time GNSS studies, 5 early stand silviculture experiments, multiple thinning studies, drone flights collecting high intensity return LiDAR and hyperspectral imagery to quantify canopy and burn characteristics. Others are monitoring harvest impacts on class I stream shade, characterizing root architecture in 25 year old plantations, installing 2 new experiments to understand impacts of mastication, evaluating camera trap equipment for monitoring wildlife populations, sampling to quantify forest insect population dynamics, and more. UIEF hosted dozens of field labs in 2016-2017, as well as workshops and other activities with FFA, PLT, ROTC and DOD, IDL, IDEQ, IDFG, and Extension Forestry. CNR is finishing up a new building on the Big Meadow unit of UIEF that will help research and teaching.

Policy Analysis Group (PAG)

FY17 was a growth year for the Policy Analysis Group. One Senior Researcher position was added, which allowed the PAG to significantly increase research and productivity in natural resource economics. A new economic contribution analysis report was completed for the forest products industry for the state of Idaho, which allows the PAG to enhance tracking of the economic contribution of all natural resources to the state's economy. Ten new policy analyses were initiated in FY 2017; ten projects were completed on behalf of state and federal partners, conservation organizations, industry associations, and related stakeholders. Clients served included the State Board of Land Commissioners, Idaho Department of Lands, Idaho Fish & Game, Idaho Department of Parks & Recreation, USDA Forest Service, University of Idaho Extension, Idaho Forest Landowners Association, Idaho Conservation Organization, Idaho Forest Products Association and others. Key projects included a survey of Idaho's family forest landowners, evaluation of state wildfire funding, assistance to the Land Board evaluating grazing rates on endowment lands, review of the Federal Forest Legacy Program in Idaho, non-motorized trail funding, and evaluating the effect of forest collaborative(s) on the pace and scale of Federal forest management. A primary task for FY17 was to establish the PAG as a go-to center for policy analysis in the state and region. We have broadened our impact, increased the number and pace of projects completed compared to recent years, and are actively soliciting new projects with partners throughout the state across natural resource topics. The PAG continues to meet its legislative mandate to provide objective data and analysis on natural resource and land-use issues of concern to Idaho citizens. The number and scope of research projects highlights our commitment to this mandate, the impact of which is to provide timely information to inform critical land management decisions at multiple levels of government.

Pitkin Forest Nursery (Nursery)

In FY 17, the Pitkin Forest Nursery produced a record number of containerized seedlings, 650,000 total. This included approximately 65 conifer and native vegetation tree species that were distributed to over 900 customers throughout Idaho and the across the United States. To support landowners affected by the 2015 wildfires in the Inland Northwest, we grew 50,000 ponderosa pine and Douglas-fir trees. All of these trees made it into the hands of those in need of prompt reforestation after fire. Multiple research projects were initiated in the Nursery this year that directly support the seedling industry, including (a) testing variants of aeroponic root growth potential chambers to assess seedling quality, (b) comparing fertilization regimes for western larch, (c) comparing new black plastic containers with standard Styrofoam blocks for three conifer species, (d) exploring the effects of rhizobacteria application on improving Christmas tree growth and native conifer productivity following planting, (e) examining the relationship between root growth potential and outplanting survival and early growth, (f) comparison of standard soil media mix to a new soil media mix. Additional research projects include examining the growth and physiology of different western larch genotypes in the nursery and refinement of root growth potential testing systems, and determining the potential to growth huckleberry in different container sizes. The Nursery was used in the Forest Regeneration class at the University of Idaho, where students learned about nursery culture and the effects of limiting factors on seedling growth and survival. Classes from the University of

Idaho and Washington State University toured the Nursery to learn about our culturing regimes. Multiple nursery tours were conducted for elementary and secondary school students from local schools, as well as for the general public. We setup a display at the Idaho Forest Landowners Association annual meeting to inform people about proper tree planting.

Rangeland Center (Center)

The Rangeland Center demonstrated solid growth in FY17. These accomplishments exceeded the mandate from Idaho Legislature to “create knowledge and foster understanding of the stewardship and management of rangelands.” Center membership includes 35 faculty from CNR, CALS, and UI Extension. The Partners Advisory Council (PAC) is at full capacity representing diverse rangeland user groups across the state. The Strategic Plan was released, and a Communication Framework is soon to be released. The Legislature added a special projects line-item to fund a Communications Specialist. Office space was established in the UI Boise Water Center, which better supports stakeholders – the majority whom live and work in close proximity to Idaho’s rangelands. Research projects have grown to 21, including projects at Rock Creek Ranch. Targeted grazing and fuels reduction research fulfills a Secretarial Order, and the sage-grouse and grazing project is a rigorous multi-partner, 10-year intensive study that will inform land management decisions throughout sage-grouse range. Center faculty engaged in 17 rangeland service projects, such as IRRC, 4-H and FFA. Our commitment to academic rigor includes 10 teaching projects at the university level, grad courses, rangeland monitoring, methodology, technology, and field tours/workshops. The Center also led a cadre of rangeland students in the National Resource Inventory (NRI) survey in partnership with NRCS. The Center supported Extension’s public outreach, including the successful “Sagebrush Saturdays” at Rock Creek Ranch. We also helped TNC/WRLT/UI gain a \$10K education grant from IFWF. The Center assisted and/or hosted CNR President’s Tour, Range Livestock Symposium, UI Law Symposium, Idaho Cattle Association conference, Idaho Rangeland Resource commission (IRRC) efforts, Idaho Governor’s Trail Ride, Fall Forums, and an upcoming Changing Climate conference. A revised Idaho Sage-grouse Habitat Guide was published, a collaborative effort with federal agencies and Governor’s Office of Species Conservation. Products now include multiple facts sheets and publications in print and digital formats, InFocus report, and Spotlight on Stewardship e-news. Projects such as the UI Rangeland Atlas (partnered with the UI Library) and the Journal of Rangeland Applications also progressed. We have begun to establish a public presence due to our efforts, and our collaborative research studies are assisting the management of Idaho’s rangelands. The scope of the Rangeland Center’s work has broadened, enabling trust and moving our role from unbiased informers to well-respected conveners. The Rangeland Center, with support for the UI Policy Analysis Group (PAG), has assumed the role of lead convener for Idaho’s collaborative land management initiative in FY18. Our collaborative work will truly help shape the future of public and private decision-making on Idaho’s rangelands.

Part II – Performance Measures

Performance Measure		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Goal 1						
<i>Achieve excellence in scholarship and creative activity through an institutional culture that values and promotes strong academic areas and interdisciplinary collaboration among them.</i>						
1. Objective A, Measure I: Number of CNR faculty, staff, students and constituency groups involved in FUR-related scholarship or capacity building activities.	actual	35	61	46	46	-----
	target	46	46	46	46	49
2. Objective A, Measure II: Number and diversity of courses that use full or partially FUR funded projects, facilities or equipment to educate, undergraduate, graduate and professional students.	actual	N/A	N/A	26	23	-----
	target	N/A	N/A	23	23	24

Performance Measure		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
3. Objective B, Measure I: An accounting of products (e.g., research reports, economic analysis, BMPs) and services (e.g., protocols for new species shared with stakeholders, policy education programs and materials provided, accessible data bases or market models).	actual	46	39	43	31	-----
	target	31	31	31	31	32
4. Objective B, Measure II: An accounting of projects recognized and given credibility by external reviewers through licensing, patenting, publishing in refereed journals, etc.	actual	15	14	15	13	-----
	target	13 referred articles	13 referred articles	13 referred articles	13 referred articles	14 referred articles
Goal 2 <i>Engage with the public, private and non-profit sectors through mutually beneficial partnerships that enhance teaching, learning, discovery, and creativity.</i>						
5. Objective A, Measure I: 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. Meeting target numbers for audiences identified below and identifying mechanisms to measure economic and social impacts	actual	N/A	N/A	N/A	1,250	-----
	target	N/A	N/A	N/A	1,250	1,750
Goal 3 <i>Efficient financial management of FUR state appropriated dollars supporting Goals 1 and 2 and leveraging resources to secure external funding.</i>						
6. Objective A, Measure I: New funding sources from external granting agencies, private and public partnerships and other funding groups.	actual	N/A	N/A	N/A	13	-----
	target	N/A	N/A	N/A	13	14

Performance Measure Explanatory Notes

- Performance Measure #1 – Seeking 20% growth by FY2023 based on increased staff resources in 2016 that allows more faculty, staff, students and constituency groups to be involved in FUR-related scholarship activities.
- Performance Measure #2 – Seeking 15% growth by FY2023 based on College and program goals to enhance coordination of course offerings and research.
- Performance Measure #3 – Seeking 15% growth by FY2023 based on a critical need to communicate with external stakeholders, and increase the pace of products produced.
- Performance Measure #4 – Seeking 25% growth by FY2023 based on increased staff resources in 2016 focused on research that will increase scientific outreach and communication.
- Performance Measure #5 – This is a new measure based on UI and College strategic goal to increase involvement and communication with external stakeholders. The target of 1,250 participants served was established from internal analysis of recent year participants.
- Performance Measure #6 – Seeking 25% growth based on analysis of projects started and completed in recent years, staff capacity, and the need to increase the pace of projects completed annually.

For More Information Contact

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