

UNIVERSITY OF WYOMING
Excellence in Agriculture Endowment Initiative and Development of Priority
Degrees Report
From the College of Agriculture and Natural Resources

1 NOVEMBER 2019

[Pursuant to 2019 Session Laws, Ch.80, Section 067 Footnote 11(b)]

To the Joint Agriculture, State and Public Lands and Water Resources Interim Committee
and the Joint Appropriations Committee

Legislative Requirement

During the 2019 Legislative Session, the Wyoming Legislature passed the supplemental budget bill, Enrolled Act 51, House, adding the following footnotes to the University of Wyoming's appropriation.

Footnotes 10 and 11:

10. Of this general fund appropriation, three million dollars (\$3,000,000.00) shall only be expended for the endowment challenge fund program as provided in W.S. 21-16-901 through 21-16-904. ... Five hundred thousand dollars (\$500,000.00) of this appropriation shall only be expended for programs associated with excellence in agricultural education and research for which matching funds are received....

11. (a) The annual earnings from the excellence in agricultural education and research endowment initiated in footnote 10 of this section shall be used for ranch and range management programs.

(b) The University of Wyoming shall consult with the joint agriculture, state and public lands and water resources interim committee to identify priority degree programs in agriculture and cooperative extension. *Not later than November 1, 2019, the University of Wyoming shall submit a report to the joint appropriations committee and joint agriculture, state and public lands and water resources interim committee on the efforts and outcomes on each of the permissible uses of endowment funds as well as development of priority degrees associated with this footnote.*

See 2019 Session Laws, Ch.80, Section 067 Footnotes 10 and 11. Report required by Footnote 11(b) emphasis added.

The University of Wyoming College of Agriculture and Natural Resources

The University of Wyoming College of Agriculture and Natural Resources maintains extraordinarily broad and successful programs of academic instruction, research, outreach and engagement, and youth and community development. The College's motto is *growing people, knowledge and communities*. The University of Wyoming offers diverse options in natural resources, agricultural, and human science degree programs. The College of Agriculture and Natural Resources offer bachelors and graduate degree programs in: agricultural and applied economics, agricultural communications, agroecology, animal science, ecosystem science and management, microbiology, molecular biology, plant sciences, rangeland ecology and watershed management, veterinary science, and family and consumer sciences, including: nutrition, fashion and textiles and early childhood education. The faculty and staff members are dedicated to providing students with strong, well-rounded academic experiences that enable them to excel.

The College of Agriculture and Natural Resource has 1050 undergraduates and 150+ graduate students. The programs are the right size for individualized attention (10:1 student to faculty ratio). For courses in the major, the College seeks to keep enrollment in lab classes at 24 or less and lectures at 50 students or less. Hands-on learning is a focus of all programs through labs, practicums and field experience. The College also offers opportunities for students to expand their experience and knowledge base through internships, study abroad, and through extracurricular activities, including: clubs, competitive teams, professional organizations, honorary societies, and agriculture-related fraternities and sororities. Placement of graduates into full-time positions is very high.

The College of Agriculture and Natural Resource's Agricultural Experiment Station supports fundamental and applied research in agricultural, natural resources, human science and community resource issues related to current and future needs of Wyoming, the region, the nation, and the world. The College operates four Research and Extension (R&E) Centers located in Laramie, Powell, SAREC (Sustainable Agriculture Research and Extension Center) at Lingle, and in Sheridan.

The Laramie R&E Center has a goal to excel in supporting research teaching and outreach for the campus community. Powell is dedicated to being the premier irrigated agricultural research and extension center across the West. SAREC's goal is to facilitate innovative discovery, dissemination and dialogue about integrated agricultural systems that are ecologically sound, economically viable and socially acceptable. The Sheridan R&E Center provides dry land and irrigated land for studies to facilitate research and education on agriculture, forage management, and horticulture. Across the College, impactful research is conducted to extend the frontiers of biology supporting animal production and forage crops, animal and plant genetics and health, control of invasive plant species, and impact of environmental factors such as fire, drought, and climate on agricultural and rangeland habitat both for food and fiber production as well as other ecosystem goods and services such as wildlife habitat, air and water quality and preservation of open spaces. Research is also conducted on agribusiness, farm and ranch management, natural resource

management, community development, and the integration of fundamental components of human life - food, shelter, clothing, human relationships, and family - with larger societal systems.

UW Extension offers programs in 4-H and youth development, agriculture, horticulture, nutrition, food safety, natural resources, rangeland ecosystems, and community development education. The motto for UW Extension is *extending knowledge, changing lives*. With offices in each of Wyoming's 23 counties and on the Wind River Indian Reservation, the University of Wyoming Extension is a leader in outreach education and youth development. Since 1914, University of Wyoming Extension educators have lived and worked with Wyoming citizens and communities providing technical assistance, courses and programs across the state.

The College was negatively impacted by the state-directed block grant cut to the 2017/18 biennium budget: (1) The College, and the University, had a very short time frame for making budget cuts; (2) the cuts were largely accomplished by sweeping open salary lines resulting from departure or retirement of faculty and staff, and (3) The College was in the middle of a demographic shift as a large cohort of long-serving faculty came into retirement. Overall, the College lost a number tenure track faculty, academic professionals, and Extension specialist/faculty positions or about a 15% reduction in the College's core workforce. UW Extension was additionally highly impacted with a loss of 40+% of extension educators in counties across the state. Recently approved faculty hires (CPM request) will restore approximately 17% of the loss in tenure track faculty capacity.

The University has been working with the College of Agriculture and Natural Resources to lessen the long-term impacts of the budget cuts and attempting to redistribute university resources to ensure the core missions of all of the University's colleges are secure. In the University's last round of hiring, the College of Agriculture and Natural Resources was provided with eight new faculty positions that will put the College on a stronger footing. The College is quickly moving forward to fill these positions.

The College's highest priority is to fill positions necessary to deliver its core land grant mission functions. Once its core functions are secure, the College will work to restore the level of faculty and staff needed to provide nationally preeminent programs.

Identification of Priority Programs

The College of ANR has been invigorated by two major developments during the 2019 legislative interim. The first is the hiring of a permanent dean in the summer of 2019. Dean Barbara Rasco joined the College at the end of June 2019. Dean Rasco is a scientist, engineer, and attorney internationally recognized for her expertise in food law, agricultural processing, and food quality. She most recently served as the Director of the joint Washington State University & University of Idaho School of Food Science. She has taught in both undergraduate and graduate degree programs in agriculture, food science and natural resources at Washington State University and in the University of Washington School of Aquatic and Fishery Sciences. She also served as a member of the Graduate

Faculty in Nutritional Sciences, School of Public Health while at the University of Washington. Dr. Rasco has substantial experience in the private sector and with economic development programs across the rural West.

Dean Rasco and her leadership team are rebuilding the administrative structure for the College, have appointed department heads, and are working on shoring up staffing at the departmental level.

The second development in the 2019 interim has been the focus by the Wyoming legislature on the College. This focus has encouraged the College of Agriculture and Natural Resources to reach out to its stakeholders, including many legislators, to develop a strategic plan that includes focus on several priority areas for the State of Wyoming.

During the 2019 legislative session, the Wyoming Legislature appropriated \$500,000 to be matched by private fundraising to create the Excellence in Agriculture Endowment initiative. Progress on this initiative is detailed below.

The Legislature also added a footnote to the university's budget that required the College of Agriculture and Natural Resources to "consult with the joint agriculture, state and public lands and water resources interim committee to identify priority degree programs in agriculture and cooperative extension."

The College of Agriculture and Natural Resources met several times with interested legislators throughout the 2019 interim. The College was invited to consult with the Joint Agriculture, State and Public Lands and Water Interim Committee at each of the Committee's three meetings held during the interim. At the June meeting, Interim Dean Mark Stayton and others in College leadership presented on the impact of budget cuts to the College and College programmatic needs. During the September meeting of the Committee, the university budget and budget process was explained, and the College presented on the land grant mission and the strategic plan, introducing priority areas. Following these presentations, the Committee was provided with tours of the Laramie Research and Extension Center and the main Agriculture building on campus (AgC). Additional presentations were provided on the Laramie R&E Center, specifically on the greenhouses, and the rodeo program.

Finally, Dean Rasco, was invited to the final meeting of the Committee in October. The Dean discussed priority areas and addressed budget footnotes on the BSL3 laboratory, progress on the Excellence in Agriculture Endowment, and the rodeo program. She also presented information on how extension personnel are hired. University and community college faculty and administration addressed collaborations in teaching, research and outreach.

In addition to legislative input, the College held several meetings with stakeholders to establish priority areas. Input was taken and discussions were had through the College's 15+ member External Advisory Board, in faculty meetings, college leadership meetings, and in discussions with stakeholders. The College has identified its most pressing priority-

to restore core personnel capacity lost through recent budget cuts, and following this, to become nationally pre-eminent in certain areas relevant to our state and region. The State of Wyoming and College constituencies have cooperated with the College to identify a set of strategic foci, including: student success, high altitude agriculture including management of invasive plant species, rural community vitality and health, and statewide engagement.

The College of Agriculture and Natural Resources Priority Areas

The College of Agriculture and Natural Resources will strive to become nationally pre-eminent in areas that leverage Wyoming's uniqueness as a high-altitude and head-water state. Student success is our highest priority initiative. The College is focusing on building cross-disciplinary programs that will not only prepare the next generation of professionals but will continue to support them once in their careers. The College is creating a strategic plan to maintain and build upon current outstanding programs and areas of distinction while also strategically placing resources in areas where the University of Wyoming can be recognized as a regional and national leader. These priorities are reflected in the hiring plan and through college resource allocation. Program priorities include the following: **Student Success**, Supporting **Wyoming Agriculture** (Livestock and Forage Production at High Altitudes, Rangeland and Ranch Management, Invasive Plant Species (IMAGINE Initiative)), **Rural Community Vitality and Health** and **Stakeholder Engagement**.

The **Student Success Initiative** involves rebuilding teaching capacity in key areas, including: Rangeland Resources (Ecosystems Science and Management, Agricultural and Applied Economics), Animal Science, Plant Science, and Family and Consumer Science. This includes a revamping of undergraduate and graduate curricula and the building out of additional distance and hybrid course offerings. This initiative requires the addition of faculty and staff.

The Wyoming Agriculture Initiative is an integrated program across teaching, research and extension in support of livestock and forage production systems under the constraints of working at high altitudes. This initiative includes rangeland and ranch management with an emphasis on beef and sheep production and forage. Additional aspects of this program involve studies on livestock and wildlife health, reclamation activities and water and watershed management in a headwaters state. As part of this initiative, an undergraduate degree plan for a BS in Ranch Management has been developed. The College is considering a proposal for required internships to include an internship on a private ranch and an internship with a federal or state agency. The program would culminate with a capstone course in the senior year based, in part, on these internship experiences. It will take time to get this proposal through the university approval process. How quickly the program can launch will be resource dependent. This initiative will require the addition of faculty and staff, some of whom would be located off campus.

Another part of the Wyoming Agriculture Initiative is invasive plant species (**IMAGINE** – Institute for Managing annual Grasses invading Natural Ecosystems) a new model of engaged research and outreach to make a lasting difference against expanding infestation

of annual grasses in Wyoming. Part of this initiative will focus on understanding the political, social and economic factors in addition to biological and ecological factors necessary for landscape level success. This initiative will also require the addition of faculty and staff, many of whom would be located off campus.

The College of Agriculture and Natural Resources is also exploring collaboration with state and federal agencies to create a Western Wyoming Rangeland Center. The Rangeland Center would focus on applied research in rangeland management and outreach programs best practices led by a consortia of university faculty and other scientists as part of the Wyoming Agriculture Initiative. Issues associated with migration corridors, invasive species, endangered species, water diversion, wildlife-livestock disease interactions, intense energy development, public/private land management issues, and large predators are among the topics that could be studied. If other aspects of the Wyoming Agriculture Initiative are funded, no additional faculty are expected to be needed for the Rangeland Center. However, there will be a need for added technical and administrative staff.

The **Rural Community Vitality and Health Initiative** is directed to improve health and quality of life for people across Wyoming, enhance community development, food security and nutrition, and financial wellness. A major part of this initiative is a joint program with the College of Education for preK-8 education. This initiative will involve the addition of new faculty and staff.

Statewide Stakeholder Engagement emphasizes rebuilding capacity in counties by hiring Extension educators and building interdisciplinary teams tied to the College strategic initiatives to make its outreach programs more effective in providing a platform for university-wide engagement. This initiative will require funding for faculty and staff.

To become preminent, additional resources to the College will be necessary. There are both personnel and facility needs.

Excellence in Agriculture Endowment

The Dean of the College of Agriculture and Natural Resources has been working with the UW Foundation to secure a match for the funds appropriated to the Excellence in Agricultural Endowment. Once fully funded, the Endowment would be equal to one million dollars and it would be expected to produce around forty-thousand dollars per year in expendable funds. The income from the endowment would be used as operational support for an endowed faculty position in Ecosystem Science and Management. It would be expected that this individual have expertise in forestry and water resource management. The salary and benefits for a faculty member would need to be provided from other sources.

Conclusion

The College of Agriculture and Natural Resources is moving forward to build integrated programs in education, research and outreach to support the range and ranch communities across the state. The University of Wyoming has prioritized the College of Agriculture and

Natural Resources and has put resources towards rebuilding the College's core capacity in teaching in animal science, plant science, ecosystems science and management, agricultural and applied economics and family and consumer science. It will take time. The ability to have premier programs in core disciplines and priority programs will require additional resources, with faculty and staffing being the most critical needs.