





## Plan of Work

FY2026



#### **Executive Summary**

### Overview

Wyoming is the least populated state in the nation with 587,618 people spread out across 97,093 square miles--99.8 percent of which is rural. Cheyenne, the capital and largest city, has a population of 65,168. The state is divided into 23 counties and the Wind River Indian Reservation. Fifty-three percent of land in Wyoming is owned by the federal or state government. Most of the state's economy is concentrated in three sectors: agriculture, minerals, and tourism. The state is a major producer of beef, sheep, wool, wind energy, coal, and natural gas. The University of Wyoming is the only university in the state.

The University of Wyoming Extension (UWE) and the Wyoming Agricultural Experiment Station (AES) are housed within the College of Agriculture, Life Sciences, and Natural Resources (CALSNR). The vision of the College is to support thriving agriculture, natural resources, people, and communities through integrating quality education, innovative research, and impactful engagement. UWE and AES are concerned with finding solutions to contemporary issues affecting Wyoming and the region through high-quality research and creative scholarship, responsive service, and statewide engagement, empowering the people of Wyoming to make choices that enhance their quality of life.

UWE will enhance capacity for success and the resiliency of Wyoming people, communities, organizations, and businesses through educational opportunities. A team-based approach to educational program leadership revolves around three focus areas which assess the needs of Wyoming residents and communities, and then prioritize and develop educational programs around those needs. The three focus areas are: Agricultural and Natural Resources, Community Vitality and Health, and 4-H Youth Development. UWE will continue to engage community members and organizations as partners and collaborators in educational efforts to build capacity in local communities throughout Wyoming.

AES supports fundamental and applied research on agricultural, natural and community resource issues related to the current and future needs of Wyoming, the region, the nation, and the world. Research and Extension (R&E) Centers within AES focus on regional research and services of interest to farmers, ranchers, consumers, managers, and communities. AES seeks to increase research engagement by collaborating with diverse research partners with mutual interests; increasing research integrated with other college mission areas; and enhancing research relevance by continuing to update and expand the stakeholder identified "Wyoming Production Agriculture Research Priorities". Research projects conducted at R&E Centers will continue to have strong educational and community engagement components.

Plans for the coming year for both AES and Extension include examining new program strengths and critical issues with an eye to establishing the basis for an updated strategic plan.





#### Actions to seek stakeholder input that encourage their participation

Stakeholder input for Extension is conducted in each of the 23 counties and the Wind River Indian Reservation and at the state level through a formal statewide needs assessment. In 2022-23, The Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming (UW) was commissioned to conduct a survey of Wyoming residents by the University of Wyoming Extension office (UWE) to assess education needs throughout Wyoming to better serve the UWE mission to positively impact individuals, families, organizations, businesses, and communities through outreach education. That survey analysis continues to inform prioritization and programming for UWE. In addition, UW Extension continually engages with County Commissioners, county-based Extension advisory committees, stakeholder organizations, and the College of Agriculture, Life Sciences, and Natural Resources Advisory Board to inform statewide needs and opportunities. UW Extension is currently reformatting a formalized needs assessment process, to be implemented in 2026, that will ensure that Wyoming's citizens continue to have a voice in -- and access to -- relevant programs and research results.

The College of Agriculture, Life Sciences, and Natural Resources (CALSNR) Advisory Board meets twice a year and provides feedback and suggestions for AES programs. The CALSNR advisory board is also going through a reorganization that will benefit both the college and the advisory board: with the addition of the Zoology and Physiology Department along with the Botany Department into CALSNR new members are being added to the board to better reflect the makeup of the college. Research and Extension Center Advisory Boards have been difficult to actively maintain, however, the Powell Research and Extension Center has an active board.



#### Methods to identify individuals and groups

The sampling frame for the Extension statewide needs assessment survey consisted of all Wyoming residents above the age of 18. The specifications of the survey called for confidence intervals of about ±2 percentage points at the state level and ±10 percentage points at the random sample level, with 95% confidence. This would have translated to about 100 completed surveys at the county level for a total of 2300 completed surveys statewide. Anticipating a response rate of about 20%, to meet the target number of completed surveys, WYSAC obtained a disproportionately stratified probability sample of 11,500 mailable addresses.

The researchers purchased the sample of 8,800 mailable addresses from the Marketing Systems Group (Genesys), a leading national vendor specializing in the generation of scientific samples. The sample drew from the U.S. Postal Service delivery sequence file, which included all mailable addresses in Wyoming (both physical and post office boxes). This sampling frame provided the most complete coverage available, as every household that receives mail had an opportunity to be included in the survey sample. There was no random selection of respondents within households; any adult household member who agreed to participate could complete the survey.

In addition to these systematic methods of gathering stakeholder input, AES and UW Extension draw on individuals and groups throughout the state to identify relevant issues of critical importance. Some examples include WY Wool Growers, WY Stock Growers, WY Wheat Growers, WY Bean Commission, WY Crop Improvement Association, local and state nutrition councils, County 4-H Leaders Councils, youth organizations such as Big Brothers, Big Sisters, and school districts. These groups and individuals provide input through both formal and informal discussions with both research and extension personnel. In many cases these groups are self-selected and engage with UW Extension employees because of their vested interest in programs. In some cases they are interested public or volunteers who wish to partner with UW Extension to better serve community needs.

The College of Agriculture, Life Sciences, and Natural Resources advisory board are represented by industry leaders, producers, landowners, government officials, and educators from throughout the state. Advisory committee members are nominated by UW Extension, AES, CALSNR administrators and faculty, and current board members.



#### Methods for collecting stakeholder input

In coordination with UWE, WYSAC developed the survey instrument for a dual mode approach for data collection. Once UWE submitted a set of draft questions, both a web survey and paper survey were created. The web survey was programmed using the Qualtrics web platform, and the paper questionnaire was formatted into an Optical Mark Recognition (OMR) scannable document using Teleform software. WYSAC sought and obtained the University of Wyoming Institutional Review Board approval for the survey.

The questionnaire was designed to not only collect information from respondents regarding their community needs, but to also present the key focus and mission of University of Wyoming Extension. The survey instrument presents information about the key programs offered by UWE.

In addition to statewide efforts, AES and Extension employees conduct informal needs assessments on a regular basis to remain current on local emerging needs. This includes key informant interviews with community partners, attending meetings of local agencies/organizations, and targeted outreach to new and often underserved audiences. Employees also review needs assessment data from local and state sources pertinent to their programming areas. Written and on-line surveys with stakeholders are also utilized to identify program needs. Relevant input from professional colleagues in Wyoming and across the nation is also gathered by faculty and UW Extension specialists. Components of a re-formatted needs assessment process starting in 2026 will include both formalized, annually reported identified needs and county scale information gathering efforts.

The reorganization of the CALSNR advisory board will provide AES Research and Extension Centers with a uniform voice to benefit campus and off-campus programs. Advisory board meetings will help identify R&E Center needs as well as contribute to the list of Wyoming Production Agriculture Research Priorities, which are stakeholder driven priorities aimed at enhancing the competitiveness, profitability, and sustainability of Wyoming agricultural systems.



#### A statement of how the input will be considered

The data analysis from the statewide needs assessment highlighted priority issues that will inform Extension programs for the next five years. The key findings were shared and discussed with UW administrators, educators, and specialists in Agricultural and Natural Resources, Community Vitality and Health, and 4-H Youth Development program areas as well as local and state level stakeholders. The core areas that rose to the top from the statewide needs assessment include:

- Career readiness
- · Civic engagement
- · Life skill development for youth
- · Leadership development
- Improving individual health and wellbeing (physical activity options)
- Food preparation (preservation)
- · Nutritious food options
- Mental health services
- · Strengthening family relationships
- · Public parks and recreational spaces
- · Agricultural profitability
- · Lawns and landscapes
- UW Extension has established collaborative teams to evaluate and address each of the core areas identified by the state
  needs assessment. The teams are charged with developing, delivering, and evaluating educational program(s) to address
  these specific, identified educational needs.

Results from advisory committee and stakeholder meetings contribute to the redirection and improvement of research programs, both at Research and Extension Centers and across the state. Stakeholder and advisory board input is used to refine research priorities and to set action and strategic plans for R&E Centers and AES. Further, the information in strategicand action plans informs hiring decisions, both on and off campus.



#### Communities, Families & Youth

Initiated on: 11/26/2019

Term Length: Long-term (>5 years)

Wyoming needs strong, dynamic, sustainable communities and voluntary sectors. Such communities depend upon individuals who are willing to accept leadership roles in municipality and/or county government and non-profit organizations to tackle human and community issues, and families who are able to make informed decisions and manage their basic needs to thrive. Furthermore, Wyoming, the nation, and the world need young people who have the skills to be responsible citizens and change agents for the future.

Research and educational programs around key community and economic development interests like leadership, management and policy challenges, workforce development, entrepreneurship, civic engagement/volunteerism, economic valuation and integrated decision-making influence the health of a community at all levels.

The financial vitality of families is often tied to the boom and bust cycle of energy sectors across Wyoming. Effective personal financial management skills are essential to surviving and thriving the economic swings associated with energy production. Wyoming is also a rural agricultural state and effective generational transition of management is crucial to the future of Wyoming agriculture. Research and educational programs can ensure that the next generation has access to the tools, knowledge, and resources needed for viable and progressive Wyoming farms and ranches.

Youth development programs create ways to engage youth within their communities, schools, organizations, peer groups, and families through opportunities that build leadership strengths and develop resiliency. In 4-H, adult volunteers partner to provide educational programs for youth and trained volunteers are essential in supporting positive youth development outcomes. Research around social change also helps prepare youth for technology advances in the future.

<u>Science Emphasis Areas:</u> Education, Family & Consumer Sciences, Sustainable Agricultural Production Systems, Youth Development

Research Projects: 3

**Extension Programs: 3** 



#### **Community Socio-economic Prosperity**

Initiated on: 11/26/2019

Term Length: Long-term (>5 years)

Wyoming's economy is vulnerable because of its historical economic dependence on agriculture and extraction industries, coupled with its sparse population. Socio-economic prosperity can be achieved through research and educational programs to strengthen individuals, families, communities, and ranch/farm operations. Impact analysis of natural resource management on public and private lands and alternative land uses; crop diversification, industry development with feasible production options for Wyoming, niche marketing and agricultural trade in the new global market environment; ranch and farm management strategies, innovative planning tools for livestock and crop enterprises, and evaluation of various risk management strategies are examples of research and educational program priorities that will bring economic value and sustainability to Wyoming. Knowledge of disaster resources, development of disaster plans, and effective decision making strategies will also prepare individuals, families and communities to mitigate potential disasters and engage appropriate responses to reduce their vulnerability to disasters.

<u>Science Emphasis Areas:</u> Bioeconomy, Bioenergy, and Bioproducts, Environmental Systems, Family & Consumer Sciences, Sustainable Agricultural Production Systems

Research Projects: 4 Extension Programs: 2



#### **Human Health, Wellness & Nutrition**

Initiated on: 11/26/2019

Term Length: Long-term (>5 years)

The U.S. Centers for Disease Control and Prevention estimates that "each year 48 million people get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases" in the United States. Risk factors range from contaminated food products to foodborne illnesses resulting from improper food handling and food production practices. Overweight and obesity rates continue to increase placing Wyoming residents at increased risk of chronic obesity-related health issues. Additionally, environmental factors such as easy access to unhealthy fast foods, limited access to recreational facilities or parks, and few safe or easy ways to walk in a neighborhood increase the risk of being overweight and obesity.

Research in Wyoming will ensure consistent access to a safe and high quality animal and plant based food supply through improved analytical techniques for detecting foodborne illnesses, protection of food from contaminants, developing new food products, etc. Educational programs focusing on food safety will strive to reduce the incidences of foodborne illnesses. USDA/FDA food safety recommendations will be delivered through programs for food service employees as well as individuals and families preserving and preparing food in private homes.

Many health, wellness and nutrition decisions depend not only on the individual but also on social, cultural, economic and environmental factors. Evidence-based policy, systems, and environment (PSE) strategies will be used to increase healthy lifestyle changes and decrease risk of obesity and chronic disease. The goal will be to increase the number of participants who meet the national physical activity guidelines and the national dietary recommendations. Participation in horticulture programs will also encourage residents to be more self-sufficient in food production and live a healthier lifestyle.

<u>Science Emphasis Areas:</u> Environmental Systems, Family & Consumer Sciences, Food Safety, Human Nutrition, Sustainable Agricultural Production Systems

Research Projects: 4 Extension Programs: 1



#### **Natural Systems, Food & Fiber Production**

Initiated on: 11/26/2019

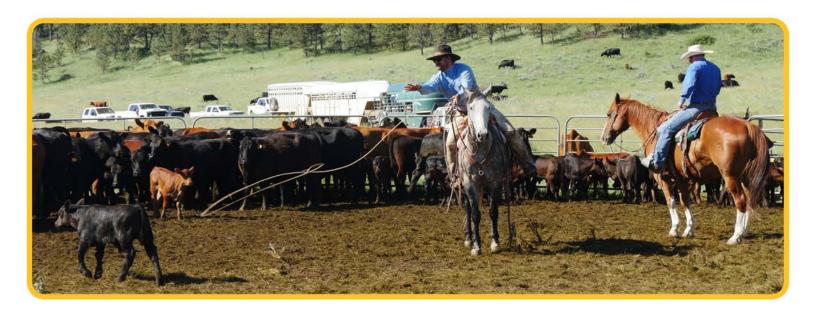
Term Length: Long-term (>5 years)

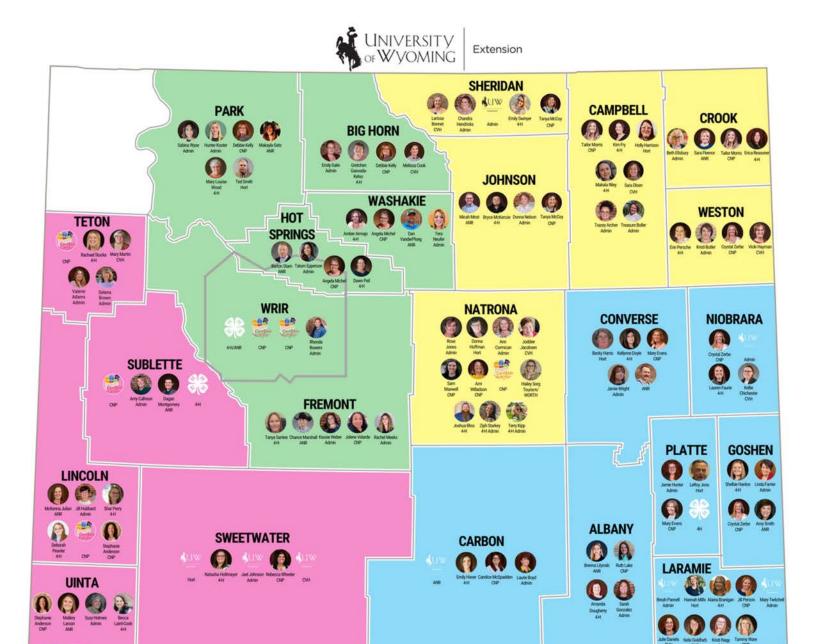
Increasing climate variability, global population growth, and environmental degradation has placed unprecedented burdens on our natural systems. Wyoming's economy is based heavily on natural resource use (mineral extraction, tourism & recreation, agricultural production), with nearly half its land area publicly-owned and managed by government agencies. A multidisciplinary, systems-based research and educational approach that contributes to thoughtful management of Wyoming's abundant natural resources is essential to understanding the increasing complexity of a rapidly changing world. Basic and applied research from microbes, insects, and wildlife, to people, communities and the environment will be the building blocks to help us understand the challenges facing our communities.

Science-based research and educational programs are critical to improving public policy, reducing conflict, and contributing to economic and ecological sustainability. Wyoming's programs seek to increase knowledge and awareness of sustainable resource use including productive and sustainable agricultural systems, healthy forests and rangelands, water and soil quality, and sustainable land use. With stakeholder input, programs will advance sustainable agriculture and livestock production to improve food security, reduce hunger, increase economic returns, and support thriving rural economies. In addition, these programs will address the needs of urban and small acreage landowners, providing education in sustainable and environmentally sound horticultural practices and maintenance of healthy urban and production forests. Pursuit of technological advances in agricultural production, processing, and distribution will contribute to sustainable production of food, fiber and bioenergy. These programs will aid in the maintenance of Wyoming's natural systems while continuing to contribute to the needs of a growing global population.

<u>Science Emphasis Areas:</u> Bioeconomy, Bioenergy, and Bioproducts, Environmental Systems, Family & Consumer Sciences, Food Safety, Meteorology, Sustainable Agricultural Production Systems

Research Projects: 17 Extension Programs: 3





# Find out more at your local County Extension Office or find us anytime at:

### uwyo.edu/uwe

Issued in furtherance of extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Mandy Marney, Director, University of Wyoming Extension, College of Agriculture, Life Sciences and Natural Resources, University of Wyoming Extension, University of Wyoming, Laramie, Wyoming 82071.

Persons seeking admission, employment, or access to programs at the University of Wyoming shall be considered without regard to race, sex, gender, color, religion, national origin, marital status, disability, age, veteran status, sexual orientation, genetic information, political belief, or other status protected by state and federal statutes or University Regulations in matters of employment, services or in the educational programs or activities it operates, in accordance with civil rights legislation and University commitment. To request accommodations, please contact UW Extension at uwe@uwyo.edu to discuss possible solution(s) to fit your specific needs.