

UNIVERSITY OF WYOMING
HAUB SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Strategic Plan 2018-22



HAUB SCHOOL OF ENVIRONMENT
AND NATURAL RESOURCES



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STRATEGIC PLAN





The Haub School of Environment and Natural Resources more than an academic institution—we are a community of students, scholars, and practitioners who work with people to build sustainable futures.

We bring creativity, innovation, and collaboration to natural resource and environmental challenges, beginning with a strong sense of place and open-minded curiosity. Using science, collaborative process, and stakeholder engagement, we then work to create sustainable solutions that support local communities.

The Intermountain West provides a natural laboratory rich in wildlife, open landscapes, and natural resources. We take the walls off the classroom, emphasizing field experiences in the West and around the globe. Both in and out of the classroom, our students learn the rewards of working across traditional boundaries—political, disciplinary, and otherwise.

We conduct research that matters to communities, managers, and decision makers working for the benefit of land and people. Haub School students and Wyoming communities benefit from the growing body of interdisciplinary research our faculty produces.

Conducting relevant research is just the first step toward informing natural resource decision making. Our Ruckelshaus Institute moves this work beyond traditional journal articles to engage a broader public. Ruckelshaus Institute practitioners convene neutral forums, publish relevant communications, and support collaborative decision-making processes that bring stakeholders together to create inclusive and enduring solutions to natural resource issues important to the future of the West.

Legacy

William D. Ruckelshaus came to the University of Wyoming in 1993 at the invitation of US Senator Alan Simpson to serve as the founding chairman on the board of a new institute dedicated to collaborative problem solving for natural resource challenges. Ruckelshaus's vision was to bring together diverse stakeholders—different kinds of people who would be affected by a given management or policy decision—to engage in civil discourse about desired outcomes for natural resource challenges. The goal was to build inclusive, lasting decisions to address real challenges. Ruckelshaus served on the institute board for nine years before becoming an emeritus member. In 1998, he received an honorary doctorate from UW, and in 2002, UW named the institute in his honor.

Alongside the institute, UW also established an interdisciplinary environment and natural resources program for both graduate and undergraduate students. A concurrent major in environment and natural resources gives students practice in, and exposure to, the theories of the collaborative, stakeholder-driven decision-making process the institute endorsed. In 2004, the University of Wyoming named the Helga Otto Haub School of Environment and Natural Resources to recognize the Haub family's longtime support of our academic programs. Today, our Ruckelshaus Institute, academic degree programs, and research work together synergistically within the Haub School of Environment and Natural Resources.

As we celebrate our 25th anniversary and the Haub School's programs continue to grow, our work is as important as ever. We are now home to six undergraduate and two graduate programs. We believe that teaching and learning are most effective when they are grounded by experiences in landscapes and communities. We pursue the notion that collaborative, stakeholder-based approaches informed by sound science are the best way to create effective, long-lasting solutions. We take pride in our role as part of a land grant university and our mission to serve students and citizens on issues directly relevant to their daily lives. We provide the skills, tools, and information needed to build both prosperous and sustainable futures in Wyoming and the West.

Mission

Our mission is to advance the understanding and resolution of complex environment and natural resource challenges. We:

- 1 educate future leaders,
- 2 provide information from the university to communities in Wyoming and the West, and
- 3 build capacity for sound and collaborative decision making.



Vision

We envision sound, inclusive, and durable solutions to our most complex environment and natural resource challenges—solutions based on the best information, crafted by diverse perspectives, and built to last.

To achieve this vision, we are striving to be the leading land grant university in place-based teaching, learning, and collaborative decision making. We are working to achieve our vision through our innovative, experience-based education of undergraduate and graduate students, research and scholarship on critical natural resource questions, and support for collaborative, stakeholder-driven solutions.



Teaching &
Learning



Research &
Scholarship



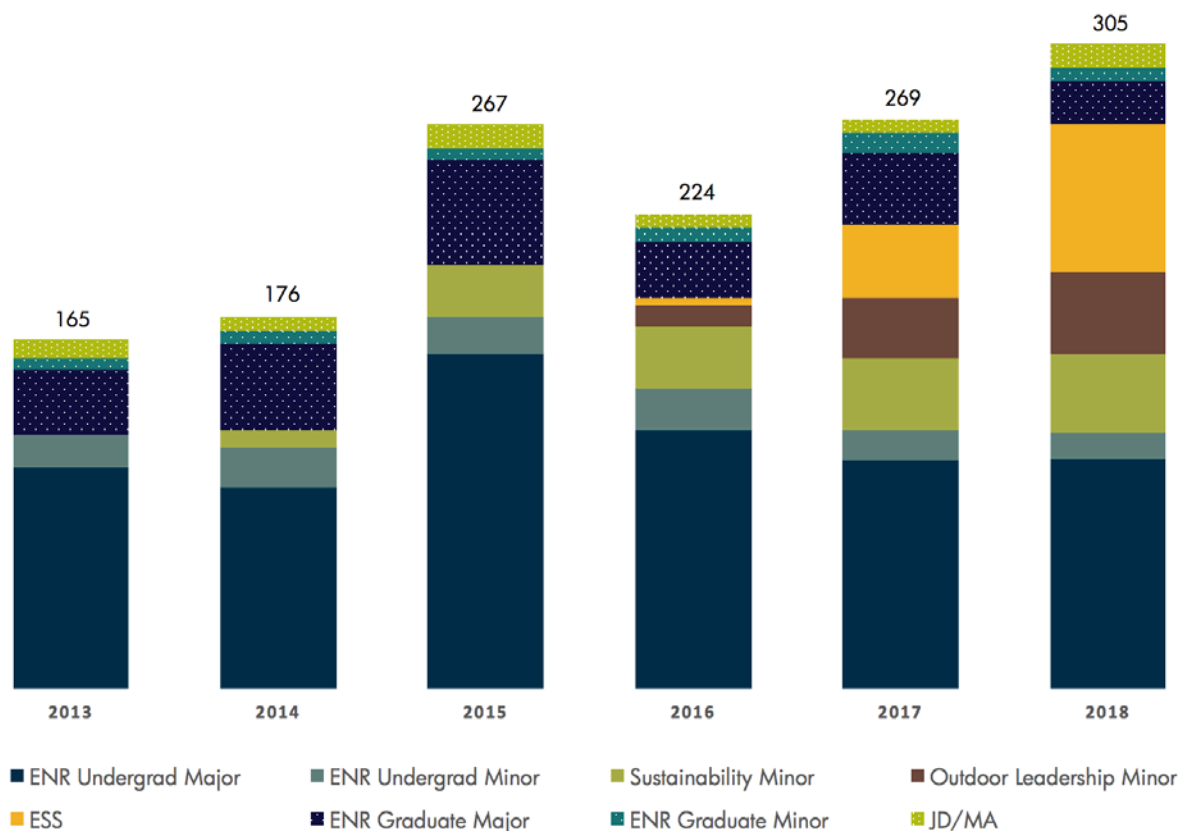
Communication &
Collaborative Process



This strategic plan will guide our progress over the next five years as our program continues to grow. While this plan will help us focus on our mission, it is also a living document that we will revise as needed to reflect changing circumstances and new opportunities.

We will implement this strategic plan following an adaptive management approach—we will set goals and objectives, and as we learn more about our needs and capacities, adjust our plan as needed. Any changes to our goals and objectives will result from careful consideration of how the proposed change will (1) advance our core mission, (2) increase our capacity to fulfill our shared vision, and (3) maintain consistency with our core values.

Haub School Enrollments





Our Values



Goals and Objectives

Goal One

Degree Programs: Educating Future Leaders

Educate future leaders so that they have the skills, tools, and experiences they need to take on environment and natural resource challenges and create sustainable futures.

Goal Two

Research & Scholarship: Driving Excellence

Produce and disseminate high-impact research and scholarship that serves the university's land grant mission and elevates recognition of the Haub School's place-based approaches.

Goal Three

Ruckelshaus Institute: Engaging Communities

Support effective environment and natural resource decision making through compelling communication, applied research, and collaborative decision-making approaches.







Degree Programs: Educating Future Leaders

We are preparing University of Wyoming students to take on some of the most challenging environment and natural resource issues ever faced. Our program focuses on providing students the skills, tools, and experiences they need to be effective.

Goal one: Educate future leaders so that they have the skills, tools, and experiences they need to take on environment and natural resource challenges and create sustainable futures

Support outstanding interdisciplinary undergraduate and graduate academic programs that prepare future leaders

- Enhance and maintain excellence in our existing undergraduate degree programs, emphasizing place-based experiences
- Provide excellent student-support services, including individualized advising, co-curricular opportunities, and field experiences for students
- Create and implement comprehensive programmatic assessment plans for each Haub School undergraduate degree program
- Offer new undergraduate degrees as needed to meet student needs
- Explore developing graduate programs that reflect our excellence in research and teaching to build future leaders

Engage diverse students in our programs and provide a variety of learning experiences and environments

- Engage with campus partners to inform the Haub School's definition and application of diversity in its recruitment, retention, and programmatic efforts
- Foster engagement in our field and international programs and work with the Center for Global Studies, the Cheney International Center, and other partners on campus to enhance these opportunities
- Work with Wyoming community colleges to support the transition of students to UW

“ Our job is obvious: we need to get out of the way, shine a light, and empower a new generation to teach itself and to go further and faster than any generation ever has. ”
—Seth Godin

Integrate community impact and student engagement through interdisciplinary teaching and research

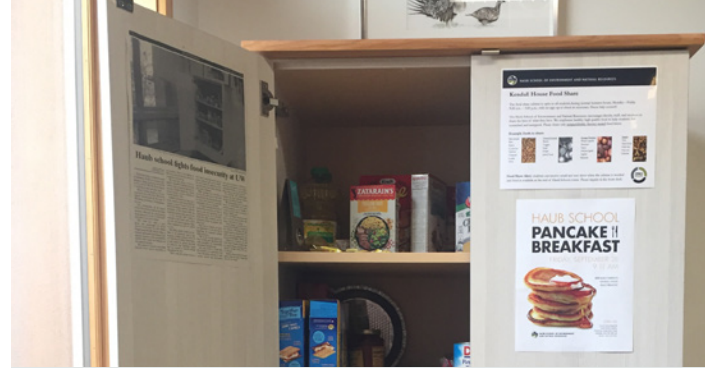
- Offer field and site-specific courses that deliver useful outcomes and value to Wyoming communities while simultaneously training students in real-world problem solving and exploration of opportunities
- Develop community-driven and community-engaged faculty and graduate research projects that address local community needs
- Participate in a vibrant community-engagement program that is coordinated with UW community-impact efforts

Lead the larger campus community in interdisciplinary teaching and learning

- Conduct research into emergent interdisciplinary pedagogy and practice
- Communicate our expertise through publications and workshops
- Reward excellence and engagement in interdisciplinary education and explore the challenge of valuing interdisciplinary activity

Support the university's commitment to sustainability initiatives

- Assist UW administration in implementing sustainability objectives in the UW strategic plan
- Use the Haub School as a pilot program for waste reduction, greenhouse gas emissions offsetting, and food security for students
- Pursue investment in UW's Conservation and Efficiency Revolving Fund



Haub School tackling hunger

Recognizing a high rate of food insecurity (a lack of consistent access to enough food for an active, healthy life [USDA]) in Albany County and at the University of Wyoming, Haub School students are working to make a difference. In 2018, students and faculty launched the first on-campus food cabinet in the Kendall House, where students can easily access healthy food donated by Haub School employees and others. Students are now working to expand the program to other campus buildings.



ENR 4890: Environmental Solutions

This course will give students hands-on experience in project development, collaboration, and leadership, and provide them with the skills and tools to solve complex environmental and natural resource challenges. Student teams will be paired with sponsor organizations to create solutions for real environmental problems. Teams will work with community leaders, businesses, non-profits, resource managers, and agencies in Wyoming and the West.

Goal Two

Research & Scholarship: Driving Excellence

Decisions regarding environment and natural resource issues need to be based on sound, science-based research. Our faculty work on issues relevant to Wyoming and the West.

Goal Two: Produce and disseminate high-impact research, scholarship, and creative activities that serve the university's land grant mission and elevates recognition of the Haub School's place-based approaches.

Advance new theory and knowledge fulfilling the mission of the Haub School

- Develop place-based, interdisciplinary research approaches to environment and natural resource management to conserve wildlife, land, and water while also supporting communities in Wyoming and the West.
- Identify core areas of expertise and develop a hiring plan to further strengthen research and scholarship in desired areas
- Enhance scholarship opportunities associated with the work of the Collaborative Solutions Program and other Ruckelshaus Institute initiatives
- Establish collaboration and communications fellowships in the Ruckelshaus Institute

Lead the campus in interdisciplinary scholarship associated with environment and natural resources

- Create interdisciplinary faculty teams to proactively tackle emerging natural resource challenges
- Foster stronger relationships across campus and across disciplines by developing communities and networks of interdisciplinary practitioners
- Work with the UW office of Research and Economic Development to secure support for interdisciplinary scholarly activity
- Proactively seek opportunities for interdisciplinary research
- Establish joint appointments between the Haub School and other departments across campus

Expand graduate opportunities in research and scholarship

- Explore developing Masters and PhD programs that support research and scholarship and prepare future leaders and scholars
- Recruit graduate students to support work associated with interdisciplinary scholarship and creative activity

“Two things interest me: the relationship of people to each other and the relationship between people and the land.”
—Aldo Leopold



Monteith Shop

Dr. Kevin Monteith and his graduate students are currently conducting research on most of Wyoming's large ungulates; topics are centered on establishing a protocol for habitat-based, sustainable management of ungulate populations, while investigating the effects of predation, habitat alteration, climate change, migration strategies, disease, growth, and novel disturbance through the lens of nutrition.

Goal Three

Ruckelshaus Institute: Engaging Communities

Goal 3: Support effective environment and natural resource decision making through compelling communication, applied research, and collaborative decision-making approaches

Lasting solutions require a commitment to collaboration. Our Institute provides sound, science-based research, and the facilitation tools needed to work with stakeholders and community members.

Be a neutral convener on environment and natural resources issues that are important to the future of Wyoming and the West

- Host forums that bring together experts, stakeholders, and decision makers for in-depth exploration of emerging natural resource issues
- Expand the impact of Emerging Issues Forums by convening working groups to generate stakeholder-driven, place-based policy recommendations
- Facilitate informed discussion of the natural resource management topics addressed in *Western Confluence* magazine by convening topical panels or creating other strategies for engagement

Facilitate and conduct information synthesis and applied research that informs natural resource management and policy questions in Wyoming and the West

- Revitalize the Wyoming Open Spaces Initiative to provide stakeholders with the information needed to understand the economic, environmental, and cultural value of open spaces

“ Be brave enough to start a conversation that matters. ”
—Margaret Wheatley



- • Develop an impactful Private Lands Management Program that provides information and tools needed to sustain working landscapes in the West
- • Assess the need for future research and outreach on water sustainability, energy mitigation and wildlife, renewable energy planning, and other important topics
- • Be strategic and flexible to respond to emerging natural resource topics the Ruckelshaus Institute is uniquely positioned to address

Produce compelling communication pieces that promote scientific literacy and advance environment and natural resources understanding

- Publish the biannual magazine, Western Confluence, to inform and engage a wide range of stakeholders on current, relevant natural resource science and management content
- • Communicate relevant scientific, legal, economic, social, cultural, and other research from Haub School faculty and partners to key audiences outside academia
- • Establish and maintain regular communication pieces to cultivate a dedicated readership through newsletters, social media, and other electronic and print formats
- • Use and innovate effective communication tools to reach diverse audiences
- Involve undergraduate and graduate students through a communications fellowship program

Build capacity for collaborative decision making in Wyoming and the West

- • Increase collaborative capacity in the state through the Collaboration Program in Natural Resources and other trainings targeted to specific agencies and organizations
- • Provide consultation, situation assessment, process design, facilitation, management, joint fact finding, and other services to support successful collaborative processes
- • Embed collaborative decision making in Haub School curricula, including a graduate option in collaborative governance
- • Document and share case studies, best practices, and new theory on natural resource collaborations to advance awareness of these processes and how they work
- • Involve undergraduate and graduate students in collaborative projects and through a collaboration fellowship program

Support vibrant communities and western landscapes through service

- • Participate in community initiatives (e.g., events or advisory groups) that are aligned with the Haub School mission
- • Advance UW's sustainability goals through service and leadership of campus sustainability efforts



Building collaborative capacity

The Ruckelshaus Institute's Collaboration Program in Natural Resources (CPNR), is building capacity for collaborative natural resource decision making in Wyoming. Every spring we welcome a cohort of 12-16 people from Wyoming and well beyond enter into this year-long training program. Participants attend hands-on learning sessions where they receive professional training in negotiation, facilitation, leadership, and collaborative processes.

Measuring Success

Goal One

Cultivate future leaders so that they have the skills, tools, and experiences they need to take on environment and natural resource challenges and create sustainable futures

Performance Indicators	Baseline	2022 Target
Maintain and enhance existing degree programs	Existing enrollments (70 ESS; 120 ENR; 37 Sustainability; 40 Outdoor Leadership) Continue providing holistic, individualized, ongoing advising	All core course teaching done by permanent Haub School-connected faculty Expand enrollments of existing programs by 20% Conduct, compile, and analyze assessment of holistic student experience/support services 60 Sustainability minors
Create Outdoor Recreation and Tourism Management (ORTM) BS degree	Trustees will consider degree proposal Spring 2018	100 students enrolled Establish partnerships for professional semester in 3 Wyoming communities
Comprehensive programmatic assessment	Complete ENR assessment plan and shift ENR to informal and ongoing beginning in January 2018 Submit comprehensive ESS assessment plan June 2018	Develop and implement comprehensive programmatic assessment for ORTM Submit and receive accreditation from the Council on Accreditation of Parks, Recreation, Tourism, and Related Professions Complete ESS assessment plan Conduct alumni, faculty, and stakeholder surveys
Recruitment and retention of majors and minors, with an emphasis on increasing diversity	Recruitment and retention plan shared internally May 2018 Require US Diversity and Global Awareness courses to complete Haub School undergraduate degrees (Fall 2017) Support the Multicultural Association of Student Scientists Promote student engagement in STEM fields through Colorado Wyoming Alliance of Minority Participation	Engage with campus partners to inform the Haub School's definition of diversity Evaluate scholarship allocations to increase recruitment and retention in Haub School degree programs Expand scholarship fund to support a more diverse student body Develop and execute a recruiting plan that will increase student diversity by 10%
Distance, online learning, and community college outreach	Inventory existing online and distance courses December 2017 Articulation agreements exist or are in process for ENR and ESS degrees with several community colleges	Convene a team to investigate distance learning options and unique opportunities Diversify course delivery portfolio based on recommendations from inventory process Finalize articulation agreements with all community colleges

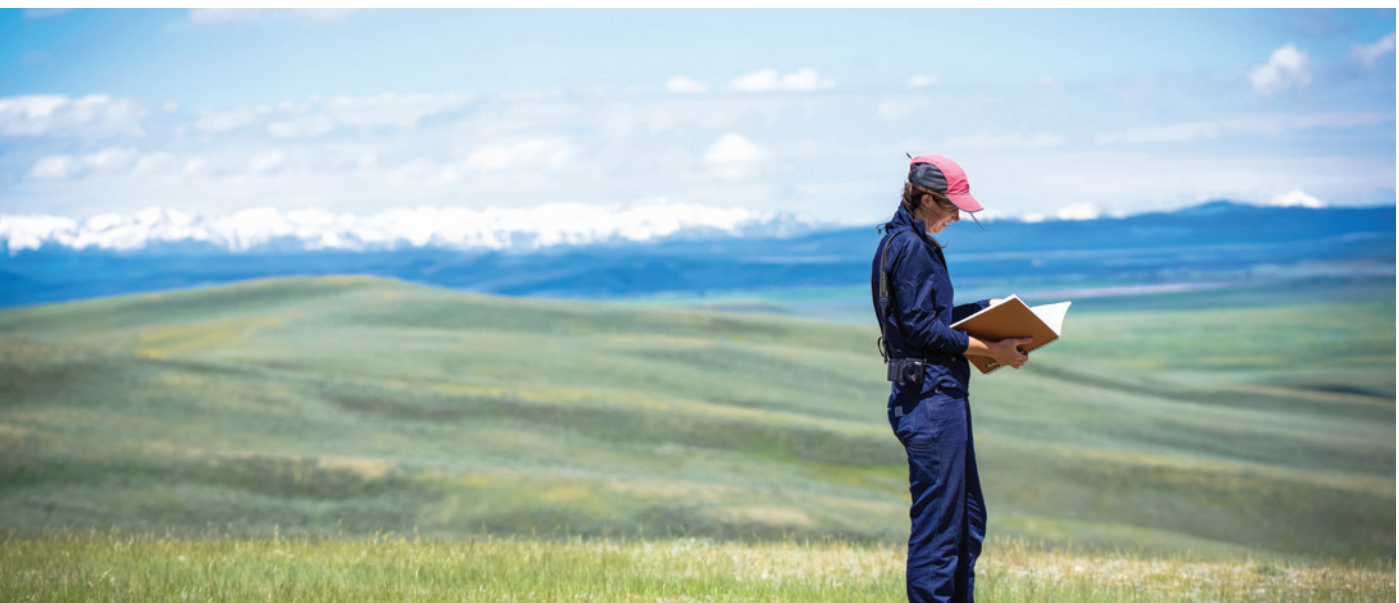
Field and international experiences	4-6 field and international courses offered each AY Haub School Field & International Experience Plan shared internally December 2018	Increase percentage of Haub School students who are empowered to participate in a field and/or international experience Build a scholarship fund to support field and international experiences
Establish regionally competitive graduate program with appropriate faculty presence and engagement	ENR Major (40 enrolled) JD /MA (12 enrolled) Current faculty: 5 TTF, 1 PP, 4 APL, 2 APRS	Explore and, if appropriate implement, ENR Masters degree Explore, and if appropriate implement, PhD proposal Increase graduate program enrollment by 10 Establish a fellowship program to support scholarly interdisciplinary activity Core faculty: 10 TTF, 2 PP, 6 APL, 4 APRS
Provide campus sustainability leadership	Sustainable Kendall House operations Participation with Campus Sustainability Committee	Implement pilot program for waste reduction Solidify fund structure and accounting model for UW's Conservation and Efficiency Revolving Fund Grow the Fund by \$1 million through membership in the national Billion Dollar Green Challenge Work with the Campus Sustainability Committee to create a plan for attaining Bronze certification under STARS (Sustainability Tracking, Assessment & Rating System)



Goal Two

Produce and disseminate high-impact research, scholarship, and creative activities that serve the university's land grant mission and elevates recognition of the Haub School's place-based approaches

Performance Indicators	Baseline	2022 Target
Increase revenue generated from funded grant proposals	\$353,988	\$424,785
Increase productivity and external recognition of scholarly work	Unknown; determine baseline via new database	1 decile improvement from baseline indicators
Identify core areas of current and needed faculty expertise	Ad hoc	Faculty hiring plan designed to support graduate work in areas of expertise
Create communications and collaboration fellowship programs for the Ruckelshaus Institute	Ad hoc	Establish a consistent method of documenting cases, deriving lessons learned, and sharing best practices from Ruckelshaus Institute Collaborative Solutions Two fellowships for each program
Provide campus leadership in interdisciplinary engagement	Mostly informal contributions, ad hoc	Coordinate a regional interdisciplinary conference Establish a seminar series that highlights, promotes, and connects interdisciplinary activities across campus Launch capital campaign for additional space needed for program expansion



Goal
Three

Support effective environment and natural resource decision making through compelling communication and by advancing collaborative decision-making approaches

Performance Indicators	Baseline	2022 Target
Continue Emerging Issues forums and other forums to highlight Haub School programs and initiatives	One Emerging Issues Forum every other year	<p>One Emerging Issues Forum every other year</p> <p>One enhanced Emerging Issues Forum with collaborative process to create stakeholder-driven recommendations</p> <p>Private lands speaker series to begin forming a network of professionals</p> <p>Annual <i>Western Confluence</i> topical forum</p>
Grow impact and readership of Ruckelshaus Institute publications and initiatives	<p><i>Western Confluence</i>: 1,900 print, 1,800 emails, 5,500 page views</p> <p>Wyoming Open Spaces Initiative: 400–750 print copies/publication, 150–300 mailed copies/publications, 1,600 emails</p> <p>Science Briefs to communicate Haub School research: template created</p>	<p><i>Western Confluence</i>: 3,000 print, 2,200 email, 10,000 page views</p> <p>Wyoming Open Spaces Initiative: 500–1,000 print copies/publication, 250–500 mailed copies/publication, 2,250 emails</p> <p>Produce and distribute 1–4 research briefs or infographics per year; track media coverage and electronic views</p>
Use new, innovative, and effective ways to engage audiences with sound information; assess effectiveness	One video summary of Wyoming Open Spaces publication per year	<p>Produce and release 1–3 science communication videos per year</p> <p>Produce a range of compelling science communication pieces for external audiences as opportunities arise</p> <p>Create a Ruckelshaus Institute communications fellowship program to engage UW student talent</p> <p>Support regular professional development for RI staff to build creative science communication skills</p>
Build more interdisciplinary collaborations	Reliance on a single major gift to support most Ruckelshaus Institute research/outreach initiatives	Initiate at least one major interdisciplinary grant application or foundation request per year in support of Open Spaces, Water Sustainability, Energy Mitigation, or other research/outreach initiatives

Build capacity for collaborative decision making	<p>Respond to requests for facilitation services for projects with statewide impact</p> <p>CPNR 2013: 16 participants CPNR 2014: 15 participants CPNR 2015: 13 participants CPNR 2016: 17 participants CPNR 2017: 10 participants</p> <p>1–2 training seminars per year in response to training requests</p> <p>Collaborative decision-making content offered in ENR 3000 and ENR 5000 since 2012</p> <p>No graduate collaboration program is currently offered</p> <p>Student participation since 2010: 2 undergraduate students 6 graduate students No Fellows Program</p>	<p>Increased capacity to respond to facilitation requests</p> <p>Annual enrollment of 10–20 participants in the Collaboration Program in Natural Resources</p> <p>Training seminars held annually in response to training requests</p> <p>Collaborative decision-making content continued to be included in ENR 3000 and ENR 5000</p> <p>Annual enrollment of 5–10 graduate students in a graduate certificate or minor program</p> <p>Annual participation by 1 or more undergraduates and 1 or more graduate students in collaborative decision-making projects</p> <p>One undergraduate/graduate and one postgraduate student enrolled in the Ruckelshaus Fellows Program per year</p> <p>Create a Collaboration Thought Piece publication series to document best practices and new theory</p>
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Articulation with UW Strategic Plan

Many of the Haub School strategic plan goals and objectives support and fulfill goals outlined in *Breaking Through*, the University of Wyoming's 2018–2022 strategic plan.

UW Goal 1 DRIVING EXCELLENCE

- Lead the campus in interdisciplinary scholarship on environment and natural resources
- Increase the impact of faculty research and scholarship
- Develop graduate academic programs that prepare future leaders
- Offer new undergraduate program in Natural Resource Recreation and Tourism
- Conduct comprehensive programmatic assessment

UW Goal 2 INSPIRING STUDENTS

- Support outstanding interdisciplinary environment and natural resources academic programs
- Integrate community impact and student engagement through interdisciplinary teaching and research
- Engage diverse students in our programs and provide a variety of learning experiences and environments
- Foster engagement in field and international programs
- Support the transition of Wyoming community college students to UW

UW Goal 3 IMPACTING COMMUNITIES

- Facilitate and conduct applied research that informs natural resource management and policy
- Produce compelling communication pieces that promote scientific literacy and environmental and natural resource understanding
- Be a neutral convener and facilitator on environment and natural resource issues
- Build capacity for collaborative decision making in Wyoming and the West

UW Goal 4 A HIGH- PERFORMING UNIVERSITY

- Diversify revenue stream for research and outreach
- Continue excellence in marketing and recruitment
- Support professional development for Haub School staff and faculty
- Support UW's commitment to sustainability



Photo by Joe Riis



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AND NATURAL RESOURCES**

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