

INTRODUCTION

Message from the Director

I am excited to introduce our school's strategic guide, a vision that will shape our future and the future of arid lands in Arizona, the southwest, and throughout the world.

The School of Natural Resources and the Environment is a leading conservation research institution and a living laboratory of natural resources stewardship. We connect the University of Arizona with the greater natural resources community across Arizona, the Sonoran desert, and beyond. Our research focuses on Arizona solutions for global problems related to climate change, arid environments, and land management.

We have welcomed over 5,000 researchers and students to innovate and train with us in Tucson over the last 50 years. We inhabit a stunning landmark building on the University of Arizona campus inspired by the slot canyons of our beloved Arizona landscape. All of this underscores our ongoing commitment to the future of conservation, applied ecology, and the ever-growing diverse community we support and appreciate.

Karly F. Itm

Director, School of Natural Resources and the Environment, University of Arizona

THE PROCESS

Creating Our Strategy

In February 2024, the School of Natural Resources and the Environment began a strategic visioning process to define our future for the next five years. The committee included staff, faculty, and a graduate student. An outside facilitator guided our inclusive and informed process, as well as helped make the process efficient and multidimensional.

The approach was designed to ensure a comprehensive, forward-thinking, transformational vision for the future, one that will position the School of Natural Resources and the Environment among the most innovative and sought-after schools of its kind in the nation. The creation of this vision included input from a broad range of stakeholders, both internal and external to the School, all of whom are dedicated to helping co-create our future together.

The strategic visioning committee worked with the facilitator to collect and synthesize the information gathered using the following process. Input was collected during two listening sessions (one in-person and one virtual) attended by SNRE staff and students along with a few faculty members who could not attend the 2-day retreat. In addition, members of the committee conducted approximately 75 one-on-one interviews with a subset of community partners. Those interviewed included stakeholders, private citizens, industry, non-profits, and municipal, state, and federal government; students, and alumni; representatives of funding agencies; and members of peer and comparable universities.

These interviews yielded over 1,000 different perspectives related to the issues, trends, and external forces affecting the School. The interviews also provided insights into our School's stakeholders, strengths and weaknesses, and visions for transforming the School of Natural Resources and the Environment over the next 3-5 years. These collective thoughts and perspectives were carefully summarized by the committee and presented at the beginning of the SNRE 2-day faculty retreat and used as a starting point to discuss strategic positioning. This comprehensive effort resulted in the following goals and objectives that will guide our School of Natural Resources and the Environment during the next 3-5 years.

TRENDS & STRENGTHS

Trends

<u>Technology:</u> In the face of rapid technological change, we must continually modernize research infrastructure and approaches while training students to responsibly use the most relevant technologies.

Affordability: We must have an unwavering commitment to high-quality education at an affordable cost, recognizing the pivotal role the cost of attendance plays in student success.

<u>Access:</u> We must support expanded access to open publishing and educational resources to make them shareable and usable by all.

<u>Environmental Resilience:</u> As the changing climate and environment creates novel needs, we must advance higher education and foster research that has local and global impacts.

<u>Value Proposition:</u> We must clearly demonstrate our proven and measurable value and impact, regardless of the prevailing national narrative.

<u>Political Landscape:</u> We must foster a collaborative relationship with local, state, and federal stakeholders to ensure shared relevance, funding, and institutional direction.

<u>Workforce Needs:</u> We must align our research and learning with industry and agency needs and workforce demands, reflecting our responsiveness to evolving societal needs.

TRENDS & STRENGTHS

Strengths

<u>Empowered Faculty & Staff:</u> We have highly credentialed faculty and staff, dedicated to societally relevant research, student success, and community outreach.

<u>Professionally-Focused Students:</u> Our students transcend classroom preparation and find success in a variety of high-impact careers and benefit from the collaborative efforts of stakeholders and academic support.

<u>Diverse Academic Portfolio:</u> We support a rich portfolio of academic programs committed to regional and state workforce needs.

<u>Transformative:</u> We inspire and empower students to achieve greatness within a highly personalized academic experience and supportive learning environment.

<u>Arid Environment, Big Opportunities:</u> We leverage our hot and dry climate into opportunities for creating resilient solutions.

<u>Inclusive:</u> We care, support, and welcome all, regardless of background. Embody an ethos of access and engagement.

<u>Leadership:</u> Our leadership in natural resources will drive the School's sustained growth, success, and impact.

OUR FOUNDATION

Our Values

INTEGRITY & TRANSPARENCY

- Champion ethical choices
- Honor commitments
- Foster trust, honesty, and openness

EXCELLENCE & DISTINCTIVENESS

- Stand for quality
- Remain ambitious
- Exceed expectations

EQUITY & INCLUSION

- Embody professionalism
- Lead with empathy and kindness
- Listen for understanding and connection

COMMUNITY & COLLABORATION

- Research and educate with purpose
- Build partnerships
- Unify through teamwork

INNOVATION & SUSTAINABILITY

- Solve real-world challenges
- Nurture innovation
- Share knowledge

OUR STRATEGIC INITIATIVES

SNRE Pillars

PILLAR I

Lead Sustainable Conservation and Management Research in Arid Environments

We will empower researchers to help create critical solutions toward sustainable natural resources, and healthy, prosperous communities, particularly in arid lands.

PILLAR II

Train Natural Resource Professionals Ready to Create Solutions in a Quickly Changing World

We will create engaged, adaptable professionals through high-quality, student-centered educational experiences focused on real-world scenarios and equip them for successful careers in natural resources.

PILLAR III

Facilitate Community and Collaboration in Conservation in Arid Environments

We will collaborate to solve urgent conservation challenges at the intersection of the environment, economy, and society.

PILLAR I

Lead Sustainable Conservation and Management Research in Arid Environments

GOAL

We will improve our high-quality research endeavors by enhancing our strength and commitment to fostering climate-resilient communities and environments, elevating open science, and developing data-informed conservation and management for arid lands.

Objective 1.1 Expand research contributions from local to global efforts on arid land conservation and management

- Strategy 1.1.1 Foster innovation in research and extension innovation by synthesizing existing research findings on arid land conservation and management from local, regional, and global contexts to identify knowledge gaps
- Strategy 1.1.2 Improve data collection, sharing, and analysis for informing conservation and management decisions in a cost effective manner
- Strategy 1.1.3 Enhance the effectiveness of existing conservation policies and practices in arid regions both locally and globally

PILLAR I

Lead Sustainable Conservation and Management Research in Arid Environments

Objective 1.2 Establish a formal process for sharing, collaboration, and matchmaking between faculty, staff, and students across SNRE

- Strategy 1.2.1 Facilitate internal networking opportunities focused on arid land research themes
- Strategy 1.2.2 Expand number of publications with multiple SNRE co-authors
- Strategy 1.2.3 Foster grant submissions with multiple SNRE faculty, staff, and students as principal/co-principal investigators

Objective 1.3 Adapt to changes in research funding to translate science into community engagement and policy action

- Strategy 1.3.1 Increase the submission of large center/institute transdisciplinary federal grants
- Strategy 1.3.2 Highlight publications which combine science with community engagement and/or policy
- Strategy 1.3.3 Promote funding dedicated to partnerships, especially those that enhance our responsiveness to and inclusion of diverse community partners

PILLAR II

Train Natural Resource Professionals Ready to Find Solutions in a Quickly Changing World

GOAL

Create new ways of preparing students for our future by integrating open-science practices and technology into their interdisciplinary curriculum, increasing their ability to engage in productive communication and problem solving, and helping them develop tools to be mentally, emotionally, and physically ready for a dynamic professional experience.

Objective 2.1 *Grow engaged, experiential, and entrepreneurial learning opportunities for all students*

- Strategy 2.1.1 Empower students to seek professional experiences outside the classroom such as internships and volunteer experiences
- Strategy 2.1.2 Embed more field-based learning and research experiences within the curriculum focusing on required courses
- Strategy 2.1.3 Improve student club participation and experiences collaborating with community partners

PILLAR II

Train Natural Resource Professionals Ready to Find Solutions in a Quickly Changing World

Objective 2.2 Update our curriculum by integrating open-science practices, emerging technologies, and interdisciplinary learning approaches

- Strategy 2.2.1 Broaden content by including key open-science principles and technological tools relevant to each discipline within the curriculum
- Strategy 2.2.2 Design interdisciplinary courses or modules that incorporate hands-on experience with open-access data, collaborative research platforms, and digital tools
- Strategy 2.2.3 Establish and curate guidelines on how to responsibly use generative AI in a professional capacity

Objective 2.3 Prepare students for a dynamic professional experience by offering career resilience and readiness training, mentorship opportunities, and networking events

- Strategy 2.3.1 Expand opportunities for career exploration within the curriculum to include job shadowing, alumni panels, and community partner showcases
- Strategy 2.3.2 Organize networking events, workshops, and conferences that facilitate connections between students and community partners
- Strategy 2.3.3 Integrate professional mindfulness, stress management, and self-care practices into the curriculum

PILLAR III

Facilitate Community and Collaboration in Arid Environments

GOAL

Inspire a culture through which traditional academic programs connect to extension activities and community partnerships by focusing on the translation of knowledge for societal impact which embraces the belief that scientific discovery is strengthened through deep commitment to applied solutions and vice versa.

Objective 3.1 Expand the reciprocal relationship between natural resource science and application

- Strategy 3.1.1 Establish an advisory board comprised of natural resource experts and advocates to provide guidance on the impact of our research activities and academic programs
- Strategy 3.1.2 Facilitate collaborative research projects between academic researchers and community stakeholders that address local environmental priorities
- Strategy 3.1.3 Recognize faculty, staff, and students who demonstrate excellence in applying scientific knowledge to environmental priorities important to community partners

PILLAR III

Facilitate Community and Collaboration in Arid Environments

Objective 3.2 Enhance curricular connection to conservation in the southwest

- Strategy 3.2.1 Integrate research opportunities into the curriculum that focus on local environmental priorities
- Strategy 3.2.2 Create opportunities for students to engage in hands-on extension and community based projects as part of their academic coursework
- Strategy 3.2.3 Promote opportunities for student club and community partner synergies

Objective 3.3 Promote knowledge translation for environmental impact

- Strategy 3.3.1 Create a community engagement calendar to translate research findings into actionable information for community partners and the general public
- Strategy 3.3.2 Improve training and resources for faculty, students, and extension professionals to enhance their skills in science communication and knowledge mobilization
- Strategy 3.3.3 Reward faculty, staff, and students who foster and maintain community partnerships

ACKNOWLEDGMENTS & GRATITUDE

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, we strive to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.

We would like to thank all faculty, staff, graduate students, undergraduate students, and alumni who generously offered input at listening sessions and interviews. We would also like to thank our various community partners in the federal, state, and local government, along with those in non-government agencies, other academic institutions and private ventures. All of these people make our actions and aspirations stronger, together. This guide would be much less rich in scale and scope without their valuable contributions.

To our future faculty, staff, students, and alumni, we can not wait for you to come join our mission and community. Go cats!

