
SOUTHWEST ENVIRONMENTAL HEALTH SCIENCE CENTER

SOFIA FORIER-MONTES

ASSISTANT DIRECTOR, COMMUNITY ENGAGEMENT CORE



WHAT IS SWEHSC?

- The mission of the Southwest Environmental Health Sciences Center (SWEHSC) is to facilitate and implement innovative research aimed at understanding the mechanisms underlying environmental health science risks and disease among people living in arid environments experiencing extreme heat events.
- SWEHSC is a NIEHS P30 center that has been operating for the past 30 years





Southwest Environmental Health Sciences Center

THE CENTER AT A GLANCE

A collaborative and interdisciplinary research center with 60 faculty research members across the University

Work occurs within 3 Research Focus Groups:

1. Environmental Exposures in Southwest Populations
2. Environmental Lung Disease
3. Adaptive Response to Environmental Stress

Members have access to 3 Facility Cores:

1. Cellular Imaging Core
2. Translational Research Support Core
 1. Data Science Resource
 2. Implementation Resource for Translational and Human Exposure Research
 3. Inhalation Exposure Developmental Resource
3. Omics Facility Core

BY THE NUMBERS



60 UA Faculty Research Members



3 Facility Cores



19 Unique services provided to researchers through Facility Cores



\$46.9 Million in NIH and NIEHS funding secured by SWEHSC researchers in the last 5 year period



\$1.5 Million in Pilot Awards funded leading to \$58.4 million in subsequent funding over the past 10 years



421 Articles and counting published in the last 5-year period



Southwest Environmental
Health Sciences Center

COMMUNITY ENGAGEMENT CORE

- Focused on connecting research happening at the center with the broader community
- Attempt to achieve this through a variety of channels



CEC – STUDENT DEVELOPMENT

- Steps 2 STEM – 4 week program where 18 high school students work at a lab on campus
 - They finish a research project and develop an academic poster based on their experience
 - They attend a weekly seminar and learn about environmental health, STEM research, and campus resources
 - They complete a poster presentation at a final showcase event to friends, family, and the UA community
- Our Land, Our Education, Our Health (OLEH)
 - 18 students from Tribal workforce development programs across Arizona stay on campus for 2-weeks
 - Develop mini-grant proposals to address an environmental health issue in their community and a corresponding academic poster
 - Learn about STEM research and campus resources for Tribal students
 - Present at a final showcase event to friends, family, and the UA community



CEC – STUDENT DEVELOPMENT

- Toxic Detectives
 - One week summer camp for local middle school students
 - They solve a “mystery” of a toxic exposure to a fictional family
 - Research their own toxin and present to family at the end of the week
 - Lots of hands-on activities all related to STEM
- Environmental Scholars
 - Program exists within Upward Bound, managed by the College of Education
 - Program participants spend 1 week with SWEHSC CEC getting a crash course in environmental health
 - Develop a mini-grant proposal to address an issue in their community
 - Present their project at the final Upward Bound event later in the summer that is open to friends, family, and UA community



CEC – EDUCATIONAL MATERIALS

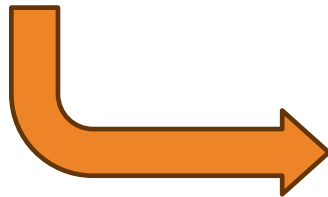
- We develop educational materials to organizations and groups that request support
 - Curriculum
 - Outreach materials, educational handouts
 - Virtual outreach materials
 - Materials in Spanish (ongoing)
- Rely on communities to let us know their concerns and priorities
- Learn community needs through attending events, connecting with individuals, and through outside connections



PFAS COMMUNITY EDUCATION AND OUTREACH

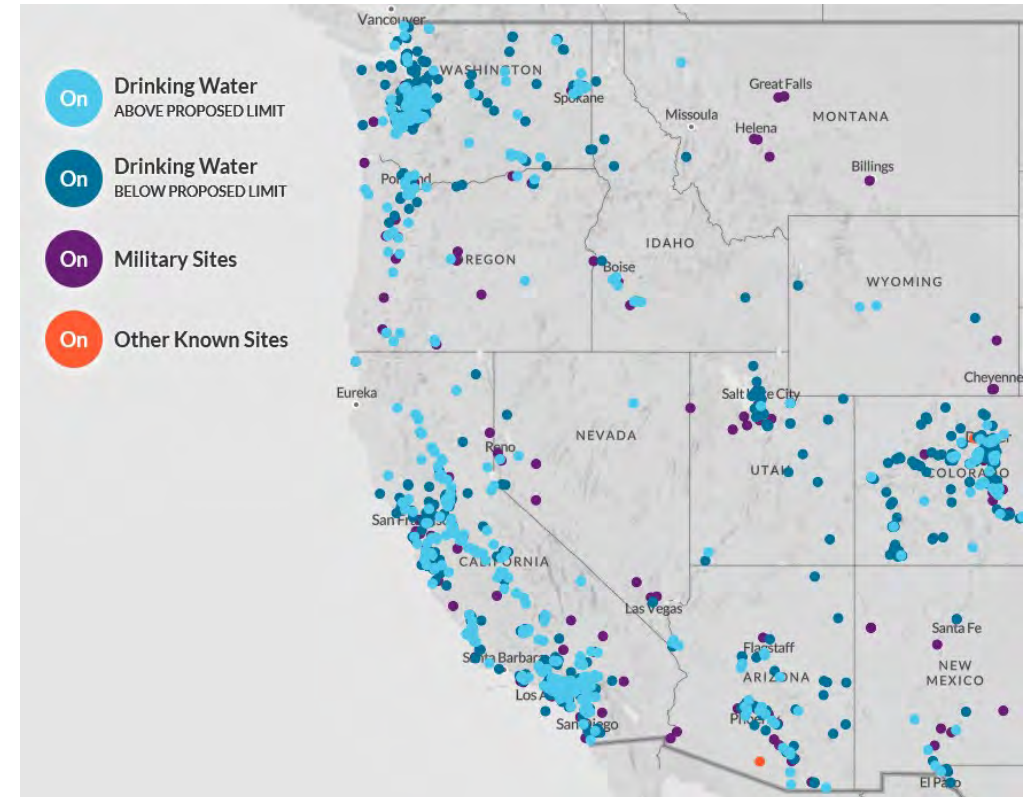
- PFAS is a worldwide problem that impacts rural and urban communities
- Private wells are beyond regulations and need to be managed by owners
- Many larger municipal water systems have regular testing and are actively managing PFAS, but individuals on private wells or small water systems may not realize they are being exposed

Link to EWG Map



https://www.ewg.org/interactive-maps/pfas_contamination/map/

Environmental Working
Group PFAS Interactive Map



PFAS COMMUNITY EDUCATION AND OUTREACH

- Collaboration with Ms. Cynthia Lopez, a high school chemistry teacher at Desert View High School in Tucson, AZ
- Ms. Tina Fingesi, a T32 graduate student, completed a guest lecture educating students on PFAS
- Hoping to collaborate with PFAS curriculum for 2025/26 class



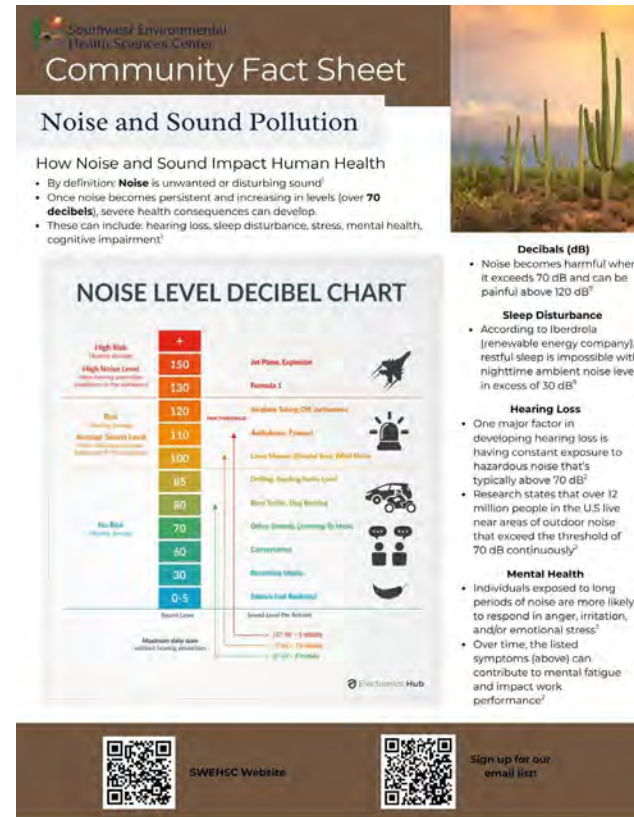
PFAS COMMUNITY EDUCATION AND OUTREACH

- SWEHSC/UA will be hosting the 2026 National PFAS Conference in June, 2026
- Working with the national planning committee to put the event together
- A unique conference that brings together researchers and professionals as well as impacted community from all over the country
- Will be an opportunity to highlight the work and challenges in AZ



PROJECT BLUE INFORMATION

- The community group advocating against the Project Blue data center reached out for support
- The CEC developed fact sheets on extreme heat and data centers as well as the noise pollution of data centers
- They were handed out at in-person events by organizers
- Also available on SWEHSC website



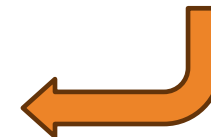
SWEHSC
Environmental
Health and Data
Centers Page

COMMUNITY AIR MONITORS

- SWEHSC has a community air monitors lending program – open to community members in AZ for free
- Calabasas Alliance collaboration with Chris Lim, PhD, a UA Researcher and SWESCH Member
 - Installed Purple Air monitors in Patagonia to collect baseline data on air quality as Hermosa Mine gets established



SWEHSC Air
Monitor Lending
Program



<https://swehsc.pharmacy.arizona.edu/facilities/translational-research-support-core/implementation-resource-translational-and-human>

COMMUNITY AIR MONITORS

- Currently collaborating with community members who are concerned about future air quality
- With our help, they installed 8 monitors around their community, including at an elementary school, to collect data and establish a baseline before mine operations begin

Hudbay bulldozing mine site in the sacred Santa Ritas despite legal challenges from Indigenous communities

By John Washington in the Arizona Luminaria Newspaper, May 6, 2022



BENSON ALUMINUM PLANT

- Have connected to various community groups in Benson that are concerned about the aluminum plant
- Working on developing infographics to educate the community on what the facility will include and potential environmental health concerns

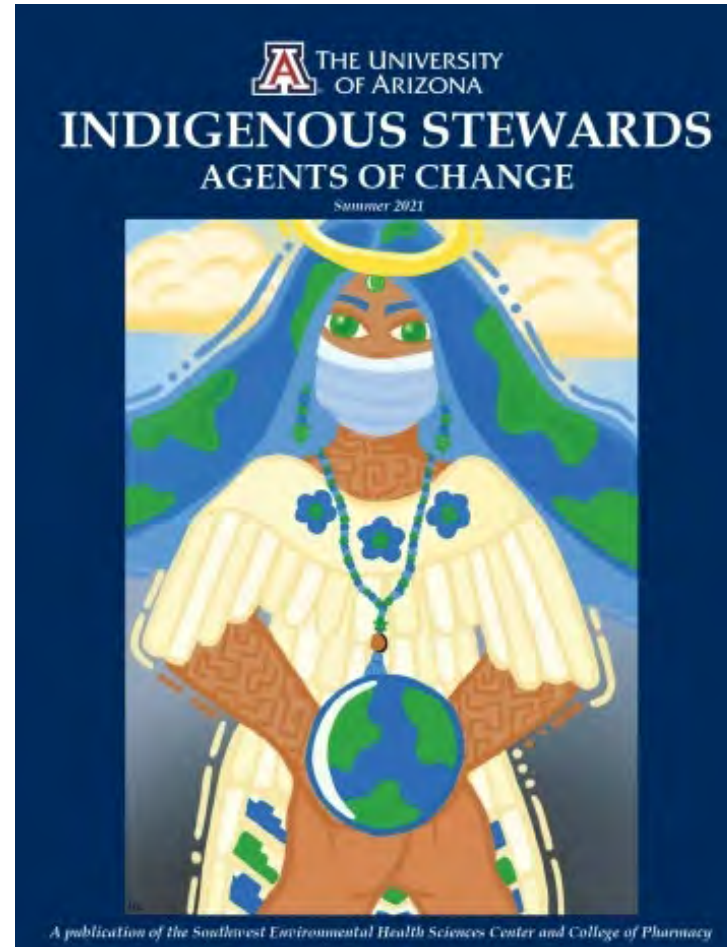
Benson residents frustrated about proposed aluminum recycling plant



An aluminum recycling plant could start construction in Benson soon, but residents are frustrated about the prospect of the industrial project.

PUBLICATIONS AND INFOGRAPHICS

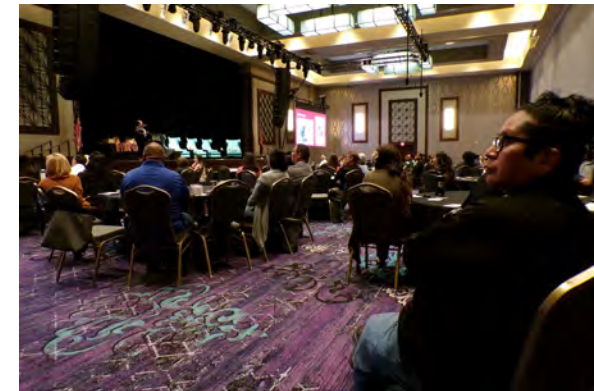
- Indigenous Stewards Magazine
 - We are restarting this effort after a hiatus of a few years
 - 5 issues published to date
 - Focuses on efforts and research on Tribal lands and communities
- Infographics for SWEHSC researchers
 - We help develop infographics for researchers on specific publications
 - Translate research into an accessible form for community engagement



2025 TRIBAL ENVIRONMENTAL HEALTH FORUM



- In collaboration with the Indigenous Resilience Center, we hosted the 2025 Tribal Environmental Health Forum
- We've been hosting these events every 2 years for 10 years
- An opportunity for Tribal communities and environmental professionals to connect and discuss Tribal-specific priorities



JOIN US FOR THE NEXT FORUM IN MAY 2027!

OPPORTUNITIES TO COLLABORATE

- We are always looking for new community collaborators
- We can help:
 - Develop educational resources that are easy to understand
 - Develop curriculums for any age level
 - Connect you with data and resources
 - Connect you with experts in the field
- We want the SWEHSC CEC is the bridge between UA faculty and Tribal communities



THANK YOU



**Sign up for our
newsletter!**

https://uarizona.co1.qualtrics.com/jfe/form/SV_eKWH416XgQL0ygu



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SWEHSC NUMBER: 520-626-5708





BRISA CENTER for ENVIRONMENT

Nathan Lothrop, PhD

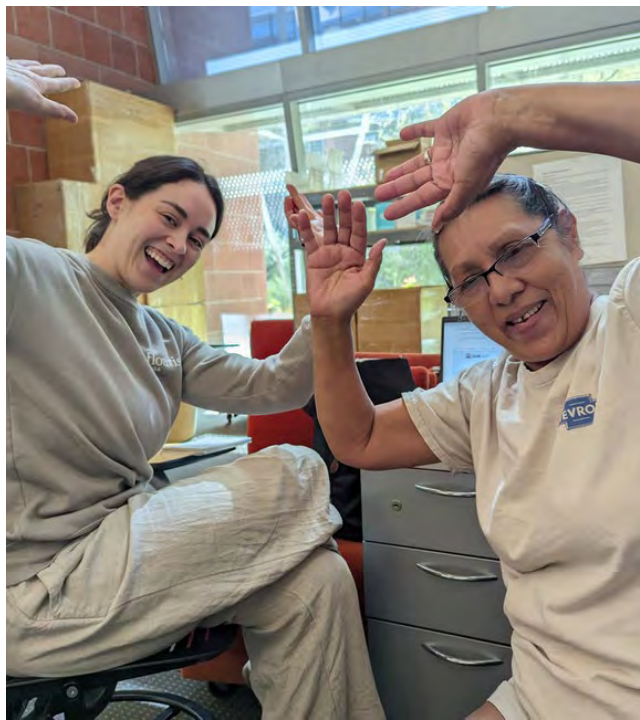
Associate Director, BRISA Center for the Environment, University of Arizona





Our Mission

To work as authentic partners with **communities** towards environmental, energy, and climate resilience, innovation, and sustainability goals by being a one-stop shop for hands-on technical assistance, multi-faceted training, and other eligible forms of assistance, resources, and support to program participants.



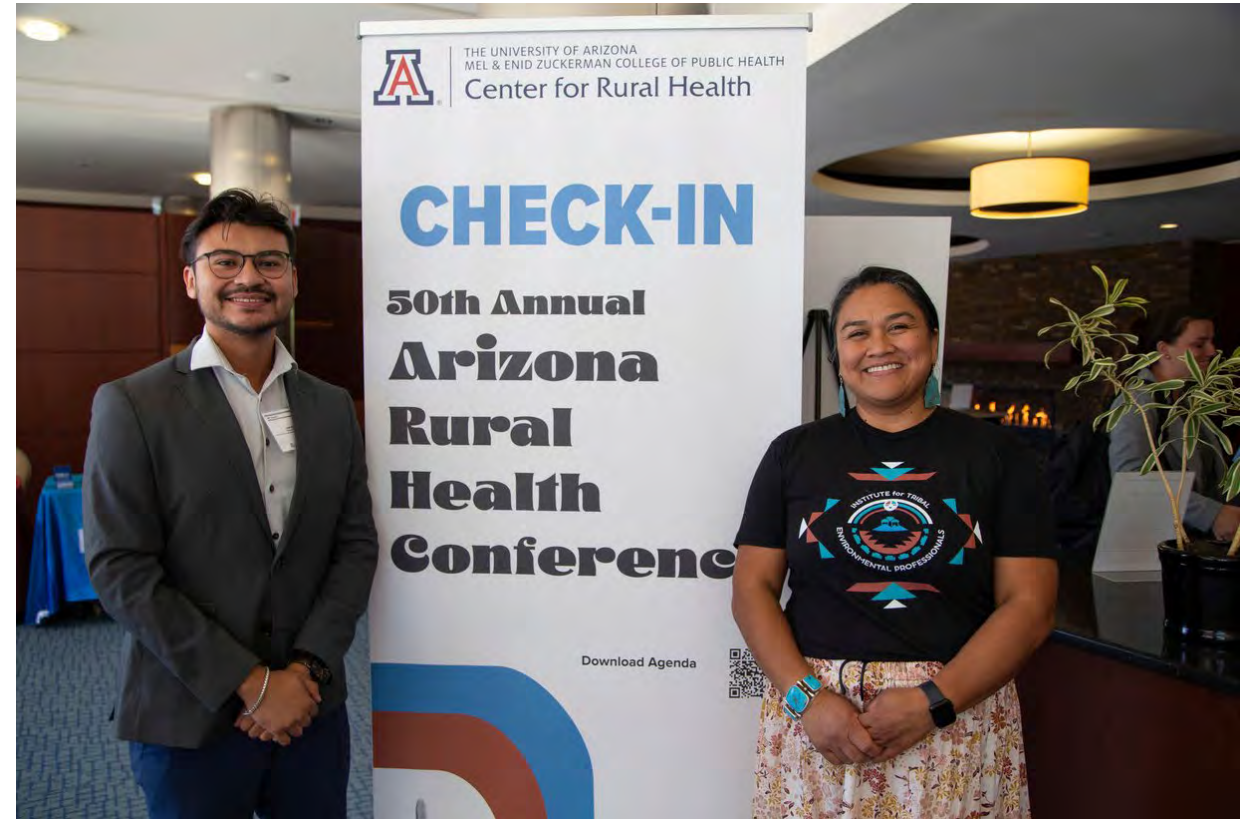
Our Team

On the ground in AZ, CA, HI, and NV, including
Native American Tribes and Indigenous communities.



Our Services and Offerings

- On-call triaging for environmental health, energy, and climate-related challenges and concerns
- Growing network of community-focused technical experts
- Free funding database of >200 opportunities from public, private, and philanthropic sources
- Free resources library with >170 resources grants, environmental health, energy efficiency and other topics
- Listening sessions report (2023-2024)



“The Center has been instrumental in connecting us to subject matter experts for answers to help advance our programs. They have been proactive, helpful, and caring, making us feel comfortable and respected.”

- Chris Casillas, Regenerating Sonora, Superior, AZ

Technical Expertise

- Environmental Health
- Epidemiology
- Evaluation
- Exposure Assessment
- Geographic Information Systems (GIS)
- Grant Planning/Navigation
- Mining Communities
- Needs Assessments
- Public Health
- Public Health Preparedness
- Renewable Energy
- Resilience and Impacts
- Rural Health
- Science Communication
- Study Design/Statistics
- Toxicology
- Training Development



Assistance Numbers (since Nov. 2023)

- Served 25 Tribal or Indigenous communities
 - AZ (12), HI (8), NM (3), CA (1), Guam (1)
 - Community Orgs (56%), Tribal Govts (26%), Individuals/Schools/Other (19%)
- 400 hours of one-on-one assistance
- 80 assistance requests ranging from looking for and applying to grants to enviro health and exposure science resources
- Supported 10 grant submissions totaling \$31.1M





Thank you!



**BRISA CENTER for the
ENVIRONMENT**

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