

Tribal Monitoring Program Overview

2018-2022



WestLand Resources, Inc.
Engineering and Environmental Consultants

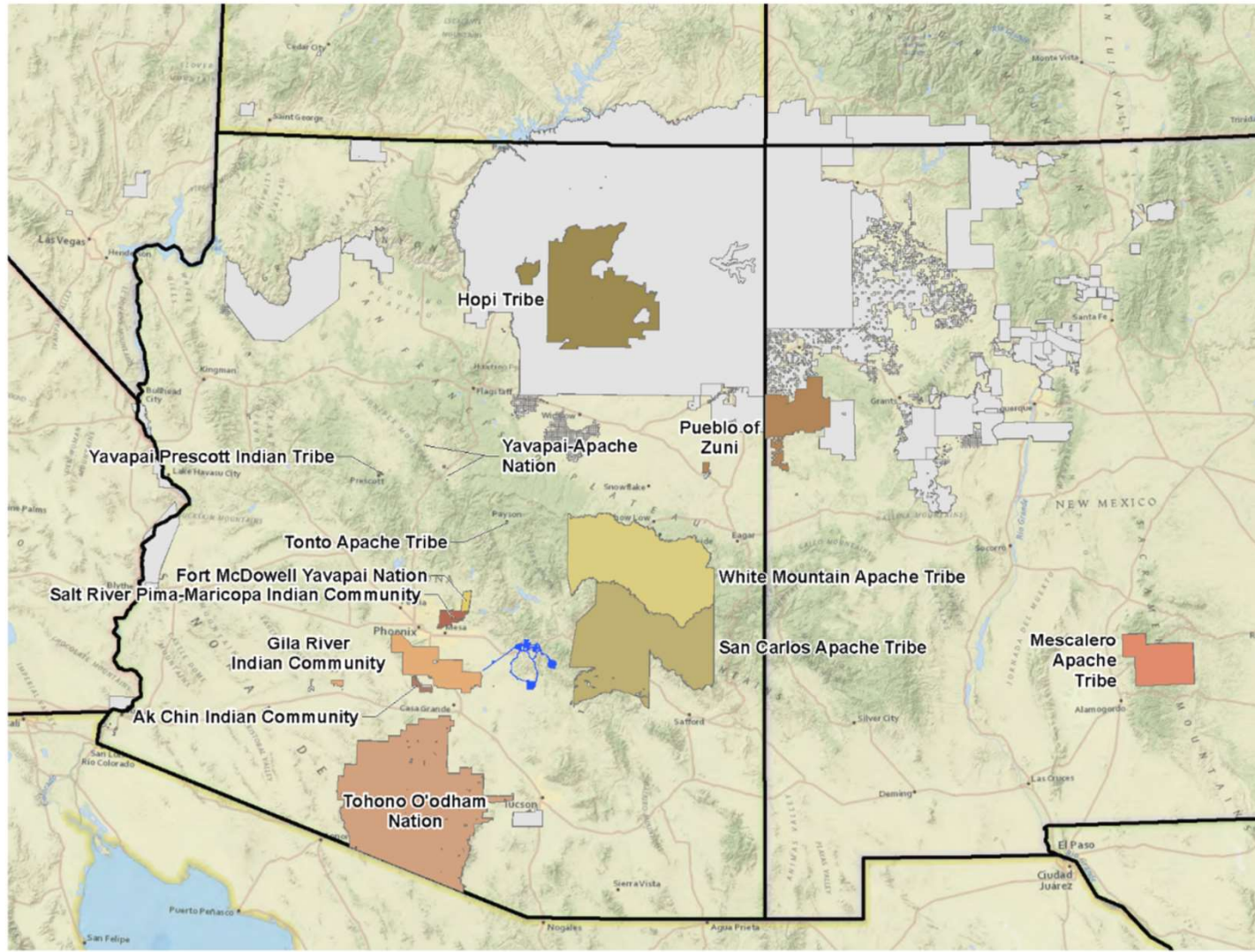
LeRoy Shingoitewa and Bernadette Carra

April 6, 2022

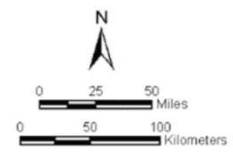
Tribal Monitor Program History and Purpose

- Tonto National Forest Tribal Monitor Program (TMP) was established in early 2018 to increase Tribal participation in cultural resources baseline studies for the proposed Resolution Copper Mine near Superior, Arizona
- Gila River Indian Community, White Mountain Apache Tribe, Yavapai-Apache Nation, Hopi Tribe, Pueblo of Zuni, Ak-chin Indian Community, and Mescalero Apache Tribe sent over 30 tribal members to be part of the program
- The monitors are the “Eyes and Ears” of the O’odham, Apache, Yavapai, Hopi, and Zuni peoples during archaeological survey, construction monitoring, and excavation projects

Provide a Native perspective during cultural and natural resource studies and increase Tribal participation in the management of our shared history, the land, and its resources



- Legend**
- Ak Chin Indian Community
 - Fort McDowell Yavapai Nation
 - Gila River Indian Community
 - Hopi Tribe
 - Mescalero Apache Tribe
 - Pueblo of Zuni
 - Salt River Pima-Maricopa Indian Community
 - San Carlos Apache Tribe
 - Tohono O'odham Nation
 - Tonto Apache Tribe
 - White Mountain Apache Tribe
 - Yavapai Prescott Indian Tribe
 - Yavapai-Apache Nation
 - Other Tribal Lands
 - Resolution Project



Tribal Cultural Consultant Representation



We have been busy since 2018!

Development of the Program 2018-2022

- Initiation with the Resolution Copper project and survey on public lands
- Expansion onto private lands as part of voluntary surveys and general integration into non-Resolution WestLand cultural and environmental projects
- WestLand has 20 tribal cultural consultants (“monitors”) on staff, including two full time positions. WRI just is an employee-owned company and the monitors are eligible for the benefits of the ESOP
- Work opportunities at other companies—the monitors have been from California to Carlsbad to New York!
- Expanded work experience and training in cultural resources and environmental consulting

Accomplishments 2018-2022

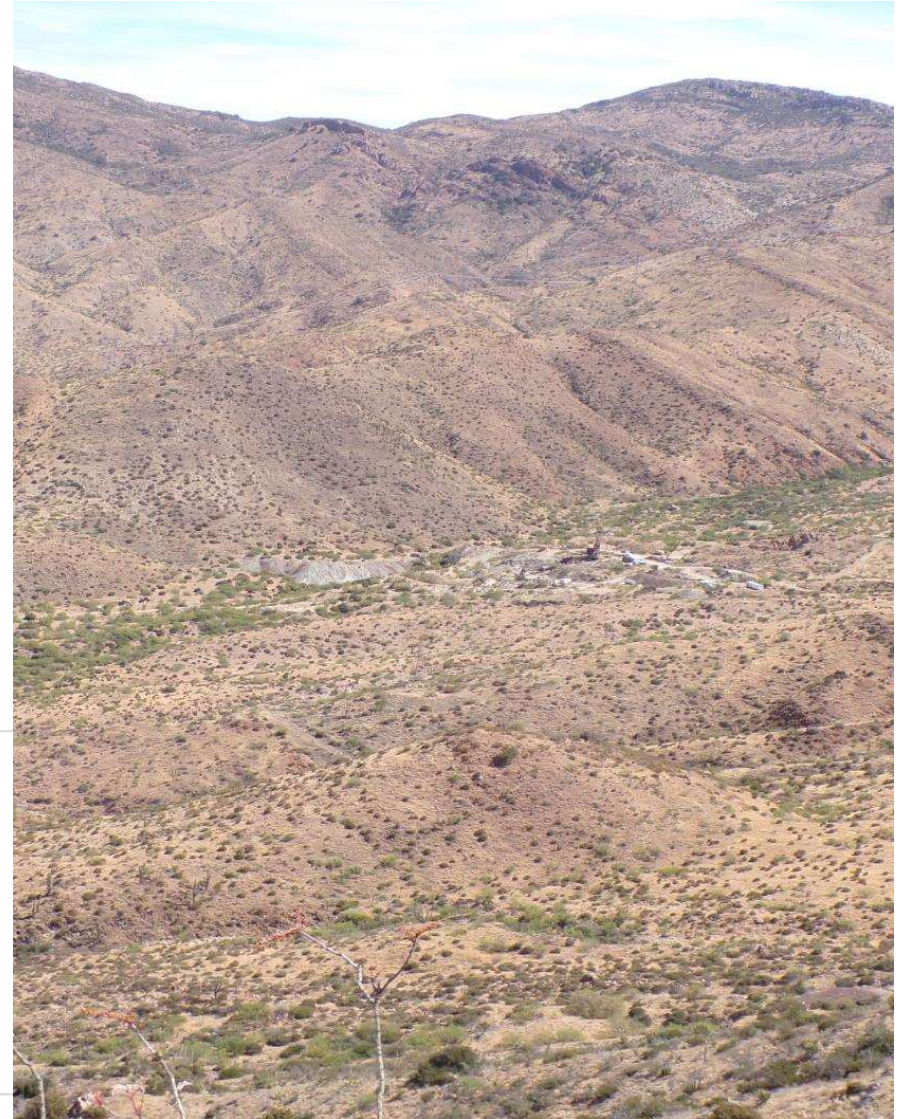
- Eyes and ears for the tribes—information source from the field
- Assistance on burial recovery and repatriation
- Work experience in archaeological data recovery, survey, monitoring, site files, and reporting
- Work experience and training in biological survey, environmental site assessments, environmental monitoring, CWA 404 surveys, project management, and office tasks
- Public outreach: AEMA Conference, Sonoran Seed Summit, AML Annual Summit: Building Trust and Taking Action, NATHPO, and presentations to non-tribal community members
- Training and education opportunities—TMs entering graduate studies
- Building TM opportunities in Nevada and Idaho

Survey Work 2018-2022

- Public lands for Resolution project, JI Ranch
- Patagonia Mountains South 32 private lands
- Globe-Miami and San Manuel BHP private lands
- Tucson and Marana Development Projects
- Dozens of large to small surveys for a variety of clients—integration into archaeological crews
- **75,000+ acres** and many a hill and valley crossed in AZ and NM
- Biological survey has also been a BIG part of 2022 workload for the crews



Monitor group has conducted over 75,000 acres of survey



**Collaborative Survey:
Tribal Monitors,
Archaeologists, and
Botanists**

- Archaeological sites
- Non-archaeological
Places of tribal value
- Springs, plants, animals
- Landscapes as a whole

Data Recovery Work 2018-2022

- Training and integration into archaeological crews
- Bagdad data recovery
- New Mexico electrical line testing and data recovery project
- Marana development data recovery projects
- Small testing and monitoring projects in central and southern AZ

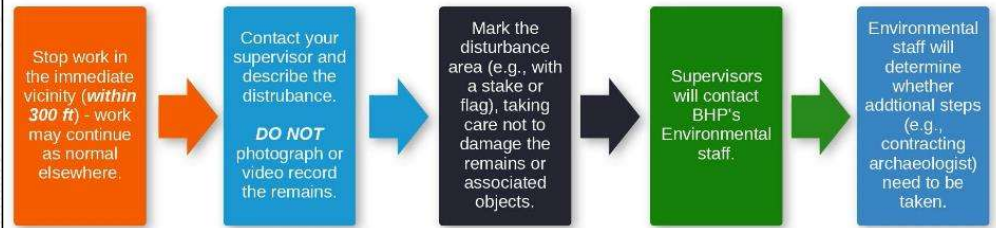




Data recovery and monitoring project work

Human Remains Disturbance Procedures

If you think you may have disturbed human remains and/or objects associated with them:



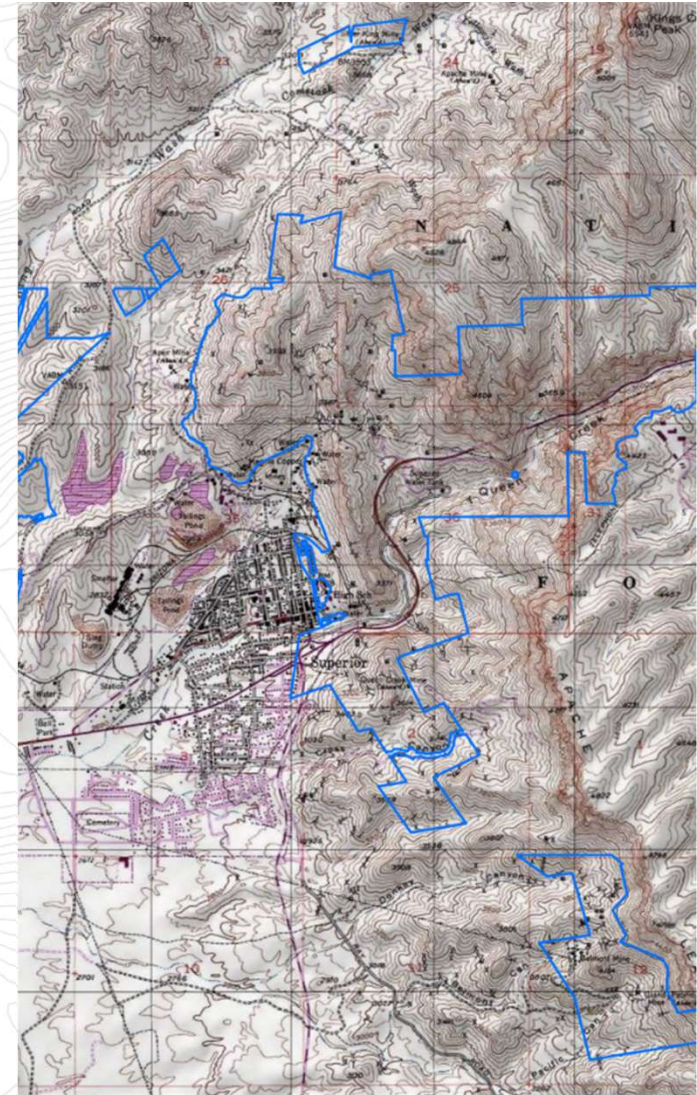
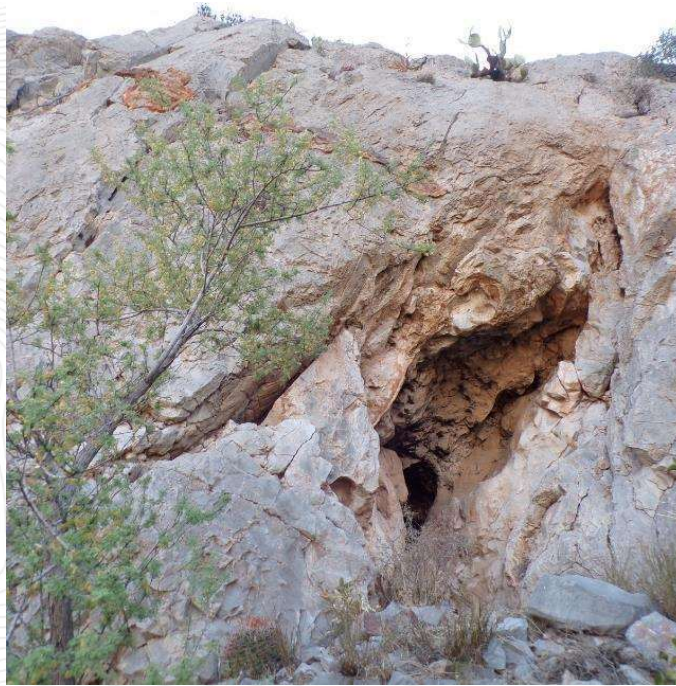
NOTICE

ENVIRONMENTALLY SENSITIVE AREA

Archaeological awareness training for construction crews



Educating Private Companies on Tribal History



Monitoring Projects Managed by TMs

- Tribal Project Manager
- Tribal Field Monitors
- Ensuring sites, plants, and animals are not impacted



ESA plant and animal survey, biological assessment, and plant salvage surveys



Plant identification and culturally significant species cataloguing

Digital tools for obtaining knowledge of plants in the American Southwest

Dawn Rocha¹, LeRoy Shingoitewa¹, Avi Buckles², Daniel McNair²

[1] Tonto National Forest Tribal Monitoring Program, [2] WestLand Resources Inc.

One of the goals of the Tonto National Forest Tribal Program is to facilitate understanding and respect for traditional ecological knowledge. The American Southwest hosts an incredible diversity of both native and introduced plant species. We focus on three open-access digital resources that we found particularly helpful in identifying plants and appreciating their role in traditional ecological knowledge. Two of these resources are databases: The Southwestern Environmental Information Network (SEINet; swdiversity.org) and the Native American Ethnobotany

Database (BRIT; naeb.brit.org). The other resource we found helpful is the digital book, Plant Utilization in Southeastern New Mexico: Botany, Ethnobotany and Archaeology (core.idar.org/document/427637).

We are grateful to members of the Tonto National Forest Tribal Monitoring Program for their participation and feedback in this process. We are also grateful to a number of other individuals and partner institutions.

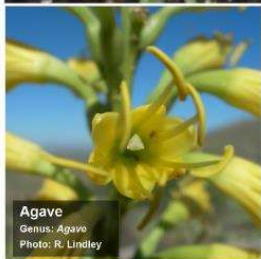
Below are images from SEINet (swdiversity.org) of culturally important plants hosted at SEINet.



Sage
Genus: *Salvia*
Photo: S. Camahan



Native tea
Genus: *Ephedra*
Photo: L. Makings



Agave
Genus: *Agave*
Photo: R. Lindley



Yucca
Yucca spp.
Photo: P. Alexander



Santa Cruz River Research Days

MARCH 25, 2021 - MARCH 26, 2021

ZOOM VIRTUAL EVENT

Santa Cruz 
RIVER
RESEARCH DAYS

Conferences and public outreach



Phase 1 ESA Site Inspection

- Physical Inspection
- Qualified “Environmental Professional”
- Owner Approval
- Notes & Photographs
- Identify ASTM “Environmental Conditions”
- Audit Environmental Records



Phase I ESA and environmental monitoring

Training Opportunities 2018-2022

- Starting with the Tonto National Forest Para-archaeology training in 2018, training opportunities continue especially during slow fieldwork times
- MSHA/OSHA, 4x4 off road, first-aid, and defensive driving
- Section 106, NEPA, ARPA, and ACHP training modules
- Plant identification training modules
- Botanical baseline data collection training
- GIS and electronic data collection training
- Office work for TM junior staff increasing in 2021 and 2022

Positive Outcomes

- Growing Recognition of the Value of TM Programs for Tribes, Agencies, and Project Proponents
- “Opening the doors” to private-lands management with collaborative private land-owners—this is the wave of the future and developing relationships with tribes and landowners is important
- New Opportunities for TM in Nevada and Idaho and Work Opportunities throughout the USA
- First WR Tribal Monitor Has Entered Graduate School
- More involvement on the back end of CRM with tribal project managers and client managers
- Better Collaboration and Understanding
- Knowledge of Heritage and Cultural Revitalization
- Information Source from the Field for Tribal Elders
- Increased Cultural Sensitivity in Archaeological Community, and amongst business interests in America



Collaboration and learning from each other...even during Covid-19

Thank you!

Questions?



Tribal Monitor Program