

Natural Resource Conservation Commissioner

Lisa A. Atkins

2019 Annual Report

*Collaboration is key to successful
natural resource management*



Natural Resource Conservation Commissioner

An Introduction to the Commissioner

It has been my good fortune to have spent a great deal of my career working in natural resources in my home State and the West. Every day, there are data, new challenges, and new technologies that improve our understanding and approach to natural resource management. However, in this dynamic field, there is one constant: **collaboration is key to successful natural resource management** and it defines the success stories in the 2019 Annual Report.

The idea is a simple, yet often under-valued, concept. Developing collaborative partnerships are a solid path toward making measurable natural resource improvements. Arizona's population continues to grow, leaving us to answer the question, "How can we expect to make progress without willing land-owner and partner collaboration?" You'll find good examples of locally-based partnerships and conservation in this annual report.

As the Natural Resource Conservation Commissioner, I am most proud of our collaboration with the thirty NRCDs across our State, and the Natural Resource Conservation Service (NRCS) to create a Memorandum of Agreement (MOA) which focuses on communication and collaboration to support voluntary, locally-led conservation. We look forward to sharing the MOA in early 2020.

Our thanks to all of the districts, landowners, and other partners who have made collaboration possible. We remain committed to creating a better Arizona today and into the future.

Lisa A. Atkins
Natural Resource Conservation Commissioner



Lisa A. Atkins

Natural Resource

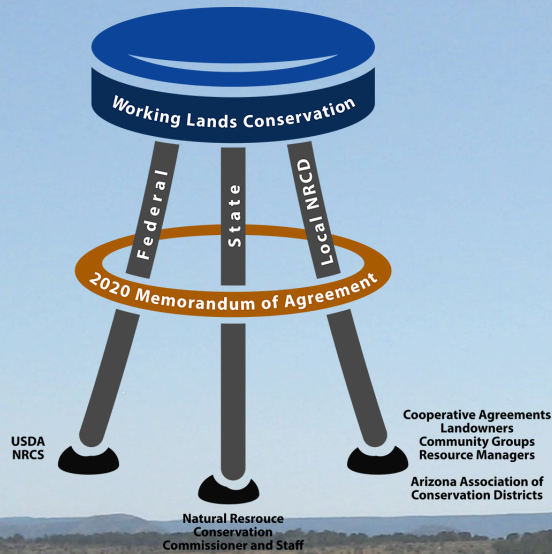
Conservation Commissioner



Structure and Approach to Conservation

Arizona's population is rising. Around 18% of land is privately owned, 27% is owned by tribes, State lands are about 12% and the remaining 42% is federally owned. We need landowners that can collaborate with multiple entities to work on projects and land management practices that conserve natural resources in Arizona.

Collaboration is a three-legged stool



- Natural Resource Conservation Commissioner provides district administration, funding, assistance, and training
- Natural Resource Conservation Service provides planning and technical assistance, cost-share programs and inspections
- Local Natural Resource Conservation Districts identify and prioritize resource concerns and use a voluntary, incentive-based approach to engage landowners

NATURAL RESOURCE CONSERVATION COMMISSIONER

The Natural Resource Conservation Commissioner administers and coordinates districts throughout the state as directed ARS 37-1013.

This is done by:

- Providing financial and operational support to Arizona's 30 Natural Resource Conservation Districts
- Design efficient program and policy structures that engage participation and deliver conservation results
- Coordinating and promoting conservation district services; providing operation oversight and administration; overseeing district elections

⇒ About the Arizona State Land Department:

<http://land.az.gov>

⇒ About the Natural Resource Conservation Districts:

<https://land.az.gov/our-agency-mission/supported-programs>



Natural Resource Conservation Districts

For more than 75 years, conservation districts have served as trusted, non-regulatory partners who engage landowners in conservation.

Each county is represented by at least one conservation district. Conservation district supervisors live where they work, making them the local experts of the landscape and people.

Conservation districts:

- Assess local natural resource needs and assist in planning projects to deliver voluntary conservation
- Facilitate guided tours and education outreach of land conservation projects and practices
- Develop relationships with local landowners

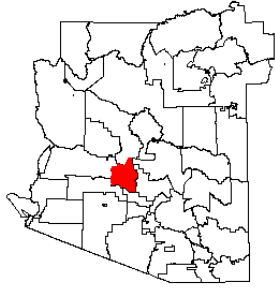


Examples of conservation projects include:

- Controlled burns and hazardous fuel mitigation
- Improving wildlife habitat
- Riparian restoration and maintenance
- Forest and rangeland health
- Leveling fields for water conservation
- Soil stabilization

The function of the Natural Resource Conservation District is to take available technical, financial, and educational resources, whatever their source, and focus or coordinating them so that they meet the needs of the local land user for conservation of soil, water and related resources.





AGUA FRIA-NEW RIVER CONSERVATION DISTRICT

Chair: Cliff Amator

Vice Chair: Mike Moore

Phone Number: 602-390-3167

Email Address: afnr.nrcd@gmail.com

Legislative District: 1, 4, 13, 15, 18, 20, 21, 22, 24, & 27-30

Congressional District: 4, & 6-9

Acres: 879,880

2019 Accomplishments

Our district focused on achieving a higher degree of efficiency in water management. The mission of the conservation board is to be the center of all conservation and environmental activities. Thus we concentrated on an inventory of all of our local resources and problems, including water use, flood control, groundwater, pollution, education or urban sprawl into prime farmland.



Project summary and results:

- Focused on implementing on-farm water management case studies
- Focused on reducing the amount of farm water use by the end of the fiscal year 2020



Key Partners:

Arizona Department of Water Resources, East Maricopa NRC, Buckeye Valley NRC, and Natural Resources Conservation Service

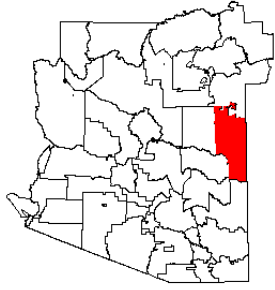
Education Center

"Envirothon opened up a whole new world to me," said Tri-City co-captain Julia Goswick. "This topic was real-world, it is so important, it covers every aspect of the world. Our team was enthusiastic and creative in working on this." Her co-captain, Ethan Krafft, said "Using new technology in food production is something we'll be able to see in our lifetime." Agricultural technology was something unique the students had never talked about before and as a result of Envirothon they gained insightful and useful information.



MORE WORK TO DO

- Partner with local farmers from Sycamore Farms, Duncan Farms, Mountain Shadow Dairy, and Rousseau Farm to observe and learn about compost manufacturing plans and to publish and distribute results



APACHE CONSERVATION DISTRICT

Chair: Daric Knight

Vice Chair: Mackey Trickey

Phone Number: 928-333-4941

Email Address: sharon.fisher@az.nacdnet.net

Legislative District: 6 & 7

Congressional District: 1

Acres: 2,549,624

2019 Accomplishments

Our district focused on water and soil conservation for the Coyote Creek watershed. Severe erosion is taking place along the creek, so bank sloping and rock structures were strategically placed along the streambanks. Partnering with local volunteers, we used heavy equipment and manual labor to place the structures along the banks. Brush management was used to remove invasive juniper and promote herbaceous grass growth. This long-term project focuses on upper rangeland health to increase water quality on the Little Colorado River, an impaired watershed on the 303D federal list. In addition, these projects decreased water turbidity and sediment load into Lyman Lake.

Project summary and results:

From 2013 through 2019, 103,107 acres are completed or pending contracts under the National Water Quality Initiative.

Key Partners:

Arizona State Land Department, Arizona Game & Fish Department, Arizona Department of Environmental Quality, Bureau of Land Management, Apache County, Natural Resources Conservation Service, Spear T Cattle, Nicoll Cattle Co., Nine Cross Ranch, Johnson Cattle Co, Knights Ranches, Shawna & Danny Lee Ranch, McFee Ranch, & Boy Scouts of America



Above: Erosion on Coyote Creek bank

Below: Nine Cross Ranch project, post erosion control



Other Accomplishments

- In addition to state funds, Apache NRCD received ADEQ Grant for \$67,530.61 and an NACD Grant for \$60,000
- Educated public about restoration and healthy grasslands
- District was approved to participate in the RCPP program for an area north of Lyman Lake



Apache NRCD celebrated it's 75 birthday!

MORE WORK TO DO

- Apache NRCD will continue to apply for grants targeting upper Little Colorado River and obtain new partners to aggressively apply conservation activities to the land
- Continue to assist NRCS and AZGFD on the Regional Conservation Partnership Program (RCPP) for rangeland health, turbidity, and erosion



BIG SANDY CONSERVATION DISTRICT

Chair: Anita Waite

Vice Chair: Beatrice Zueger

Phone Number: 928-765-2397

Email Address: bigsandynrcd@gmail.com

Legislative District: 5 & 7

Congressional District: 1 & 4

Acres: 4,932,543

2019 Accomplishments

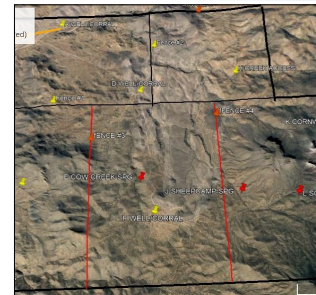
To address National Environmental Protection Agency and assessment planning for our watershed, we are evaluating and developing a plan for riparian restoration, flood and fire control, and water augmentation. If nothing is done, we are in danger of catastrophic fires and water shortage crisis in the future. This is a multi-year, multi-agency project.

Project summary and results:

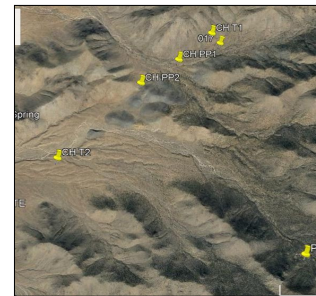
- Big Sandy NRCDC has created and signed several Memorandum of Agreements including Arizona State Land Department, Mohave County, and Kingman Natural Resources Conservation Service
- Big Sandy NRCDC has hired a field technician that is working with land owners on maps of their land and allotments for our needs assessment plan, as well as a consultant to write the documents

Key Partners:

Arizona Game & Fish Department, Arizona State Land Department, Bureau of Land Management Kingman & Havasu offices, Natural Resources Conservation Service, U.S. F&W, Arizona Department of Agriculture, University of Arizona Extension Office, Mohave County, Mohave County Farm & Livestock Bureau, Freeport McMoRan, NACD, AACD, ranchers, and general public



Mapping for projects on a ranch for the NRCS



Inventory map for planning



Dense brush that needs to be treated

Other Accomplishments

- **Workshop with Ranchers**—Ranchers need to be a part of the needs assessment planning, as they know what is needed on each allotment. Twenty nine people attended our workshop and we received input from several ranchers.
- **Student Intern**—In partnership with the Arizona Association of Conservation Districts, Big Sandy advertised and found a student to receive resource training through a hands-on summer internship with the Natural Resource Conservation Service.
- **BIG SANDY NRCDC EDUCATION CENTER**— Initial **Natural Resource Education Project** allowed the contracted education staff to contact each classroom 3 times/year to present and provide materials, they reached 1,380 students in 75 classrooms.

MORE WORK TO DO

- To determine and plan what projects are needed over our five million acres to meet objectives and be able to obtain funding from sources, to be determined, once we know the district needs.



BUCKEYE VALLEY CONSERVATION DISTRICT

Chair: Todd Rovey

Vice Chair: Tim Grandy

Phone Number: 623-386-4631

Email Address: rayannel@yahoo.com

Legislative District: 4, 5, 13, & 19

Congressional District: 3, 4, & 8

Acres: 1,375,460

2019 Accomplishments

Our district supports educational outreach to cooperators and community members on conservation and environmental topics, including water conservation and invasive plant species eradication. We also assist with implementation of pilot projects in the lower Gila River to demonstrate a healthy ecosystem. This water shed is impaired by tamarisk, which impacts ecosystem services of the riparian area. There is also a need to understand the importance and sustainability of soil, water, energy, plants, and wildlife.

We used these curriculum to deliver the above message: Back Yard Conservation, NACD Soil & Water Stewardship, Off Highway Vehicle, Original, Project Food Land & People, Project Learning Tree, Project WET, and Project WILD.

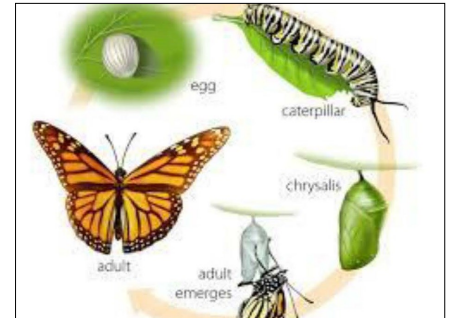
Project summary and results:

We reached seven school districts with our curriculum , totaling 5,215 contacts:

- Grade K-3: 2,438
- Grade 4-6: 2,218
- Grade 7-9: 54
- Grade 10-12: 312
- Teachers: 195

Key Partners:

Arizona Department of Agriculture, Arizona Department of Environmental Quality, Arizona Department of Forestry and Fire Management, Arizona Game & Fish Department, Arizona Department of Water Resources, Arizona State Land Department; Bureau of Land Management, Local Government, Natural Resource Conservation Service, University of Arizona; U.S. Bureau of Reclamation, U.S. Fish & Wildlife, & USDA Agricultural Research Service



Above: This speaks to our butterfly program
Below: Salt Cedar or Tamarisk population has taken over the Gila River bed



Education Center

BUCKEYE VALLEY CONSERVATION EDUCATION CENTER has allowed Sentinel students to grow and experience life inside and outside the classroom. The 'science ladies' have broken up the monotony by presenting in-class natural resource programs throughout the school year. All programs were hands-on interactive learning and correlated to the state science academic standards.

Participatory teacher, Mrs. Davis said "Our students look forward to the 'science ladies' programs. The hands-on activities enhance the academic programs that we are providing. Ms. Dee and Ms. Ester make learning fun".

MORE WORK TO DO

- Our district will be involved in Lower Gila River Collaborative which controls and eradicates salt cedar, an invasive species. This is a work in progress. District board members will continue to attend monthly meetings to coordinate with other agencies concerned with the restoration of the Gila River.



CHINO WINDS CONSERVATION DISTRICT

Chair: Bert Teskey

Vice Chair: Gail Steiger

Phone Number: 928-910-4482

Email Address: carmen.goswick@az.nacdnet.net

Website: www.wycecaz.com

Legislative District: 1 & 6

Congressional District: 3 & 4 **Acres:** 2,584,045

2019 Accomplishments

Chino Winds NRCD has applied for and received an innovation grant through the Natural Resource Conservation Service, allowing us to purchase a Phantom 4RTK drone. Chino Winds NRCD will work with ranchers to implement prescribed grazing habitat restoration. The drone, coupled with a licensed drone pilot, will capture survey-grade data on a minimum of six NRCS projects and two engineering surveys. The Local Work Group identified grasslands requiring restoration of approximately 8,000 acres.

Project summary and results:

In the first two months we have flown two demo flights on local Yavapai County ranches. Our drone specialist has received his 107 remote pilots license through the FAA.

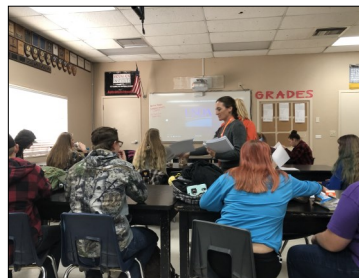
Key Partners:

Natural Resources Conservation Service, local land owners and ranchers



Other Accomplishments

WESTERN YAVAPAI CONSERVATION EDUCATION CENTER (WYCEC) - We support the WYCEC educating school children and adults on where their food comes from and what it takes to get food on the plate. In 2018-2019 school year, we reached 8,800 students in K-4 and high school. Our supplies are currently provided by Arizona Farm Bureau for grades K-2, and WYCEC covers the cost burden for grades 2-4 and high school.



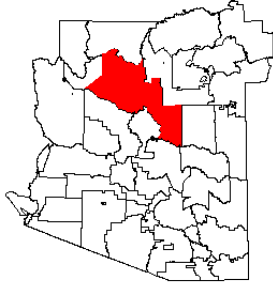
Dani Jean Lawrence at Chino Valley High School Teaching Careers in Agriculture.



Cassandra Manifee teaching in Prescott Valley in April 2019

MORE WORK TO DO

- WYCEC would like to reach more students more often in the school year. This goal is dependent on additional funding as we have programs and readers in place. We would also like to develop a program to educate our summer camping visitors on the necessity of forest stand improvement. Our close association with Arizona Department of Forestry and Fire Management (DFFM) will be a great resource for science based curriculum and relationship development.



COCONINO CONSERVATION DISTRICT

Chair: Paul Babbitt

Vice Chair: Benny Aja

Phone Number: 928-286-7446 or 928-779-1745

Email Address: coconinonrcd@gmail.com

Website: www.facebook.com/Coconino-Natural-Resource-Conservation-District

Legislative District: 6 & 7

Congressional District: 1

Acres: 25,515,267

2019 Accomplishments

The Northern Arizona Grassland Initiative is managed by Steve Cassady with Arizona Game and Fish Department (AZGFD) Region II. The program focuses on partnering with the State's private landowners and agricultural producers to implement mutually beneficial habitat projects. Using a variety of funding sources, priority is given to shovel-ready projects that benefit multiple wildlife species and rangeland management.

Project summary and results:

- 9,351 acres of grassland restoration has been completed using AZGFD match funds
- 7,321 acres of grassland restoration has been completed or is under contract utilizing Regional Conservation Partnership Program (RCPP) Environmental Quality Incentive Program (EQIP) funds
- 144,000 acres are now available because of water development using AZGFD match funds
- 32,000 acres are now or will be available because of water development utilizing RCPP EQIP funds
- 48 earthen stock tanks serving 240,000 acres were refurbished utilizing AZGFD match funds

Key Partners:

Diablo Trust, Bar T Bar, Flying M Ranch Ranchers and Permittees, Coconino and Kaibab National Forest, Arizona State Land Department, Natural Resources Conservation Service, Habitat Partnership Committees, Forage Resource Study Group, Rocky Mountain Elk Foundation, US Fish and Wildlife Service – Partners Program staff, Arizona Department of Environmental Quality, & Arizona Game & Fish Department



Above: Before juniper mastication on CO Bar ranch. Below: Removal of juniper creates an open landscape for pronghorn migration and increased forage potential for all species.



Education Center

WILLOW BEND ENVIRONMENTAL EDUCATION CENTER (WBEEC) - This year WBEEC was recognized as the "Organization of the Year" by the Arizona Daily Sun. The mission of the Education Center is to provide outreach services that build environmental awareness and an ethic of responsible stewardship of our natural and cultural resources. This is our 40th anniversary and over the past 12 months we served more than 18,000 students and community members, continued restoring our Habitat Gardens, and received the honorable Organization of the Year Award in Flagstaff, AZ.

MORE WORK TO DO

- Coconino NRCDC is a collaborative partner in the rangeland restoration project and hopes to cooperate on an additional 5,000 acres that are funded with AGFD match funds and planned for completion by the end of fiscal year 2020



EAST MARICOPA CONSERVATION DISTRICT

Chair: Scott Loughhead

Vice Chair: Jason Rowley

Phone Number: 602-620-9148

Email Address: mdufort2002@yahoo.com

Website: <http://www.emnrcd.org>

Legislative District: 1, 8, 12, 15-18, 23-26, & 28

Congressional District: 4, 5, 6, & 9 **Acres:** 1,079,362

2019 Accomplishments

The Water Conservation Management Program (WCMP) provides irrigation services that help improve irrigation efficiency and save money for farmers. Through a cooperative effort between this district and the Arizona Department of Water Resources, the WCMP in the Phoenix Active Management Area provides water measurement, slope determination, irrigation scheduling assistance and irrigation system evaluations. Land managers, including Duncan Farms, have implemented practices to make groundwater use more efficient with sprinklers, drips, scheduled water and manual pumps and valves.

Project summary and results:

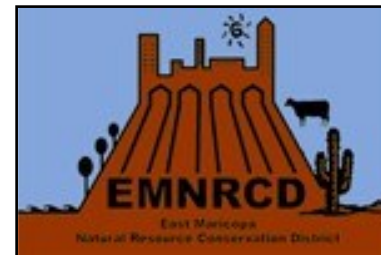
Producers throughout Arizona know that water conservation in our state is a primary resource concern. The practices implemented by WCMP and supported by our district have resulted in producers implementing water saving practices on approximately 25,000 acres of farmland conserving 8,620 acre feet of water, as well as \$300,000.



Linear overhead sprinklers on Ak-Chin Reservation farmland use less water than in the past



Small sprinkler system on Duncan's family farm illustrate lower water consumption



East Maricopa Natural Resource Conservation District

Key Partners:

Arizona Department of Water Resources, American Agrotech, Desert Willow Environmental Education Center



Desert Clean-Up Event 2018 "People have to come out and see the devastation for themselves...a few short hours of our time makes such a big difference and is beyond rewarding."

Education Center



DESERT WILLOW ENVIRONMENTAL EDUCATION CENTER—A dozen volunteers filled four 40 yard roll-off dumpsters for a grand total of 7.9 tons of trash in a bi-annual desert clean-up project in partnership with Arizona State Land Department. The events are posted on our Facebook page where we had an interest of 70 local folks, therefore a great resource to recruit volunteers for future projects the district hosts. Education is a key component of the district and has helped clean up local lands with our "boots on the ground".

MORE WORK TO DO

- It is also the goal of East Maricopa Natural Resource Conservation District, in collaboration with WCMP, to perform 40 stand-ard evaluations as part of the grant deliverables
- Host 2020 bi-annual clean-up days to rid Trust Land of trash/illegal dumping



ELOY CONSERVATION DISTRICT

Chair: Ronella White

Vice Chair: John Donley

Phone Number: 520-836-1960 Ext. 103

Email Address: e_fc_wpnrcd@yahoo.com

Legislative District: 8 & 11

Congressional District: 1

Acres: 298,426

2019 Accomplishments

Partnering with two other NRCs, we support the NATURAL RESOURCE EDUCATION CENTER (NREC), which operates a four acre irrigated cropland at Central Arizona College - Signal Peak Campus. Years ago, we realized that many children and adults have only a vague understanding of our natural resources and agriculture, and the importance these play in their lives. To many, water comes from the faucet and food comes from the grocery store.



Demonstration garden to highlight crops that are able to be grown locally. Growing and buying local foods is one of the top choices to make to reduce climate warming.

Project summary and results:

NREC programs provide elementary students a hands-on farm and conservation experience through five different field day programs. These field days build on what the students learned the previous year. Kindergarten through fifth grade students learn the water cycle, water management and conservation, flood control basics, the important relationship between water, agriculture and food and where their food comes from. To produce a program of such variety, cooperators donate seed and resources to planting, maintaining, and harvesting. This year, we exceeded our goal of 4,000 students', NREC contacted 4,466 students, totaling 11,729 instruction hours.

Key Partners:

West Pinal Natural Resource Conservation District cooperators & friends, Florence-Coolidge Natural Resource Conservation District cooperators & friends, Arizona Department of Water Resources (ADWR), Arizona Public Service Electric Company, Central Arizona College-Signal Peak Campus, Fast Track Farms, Groundwater Users Advisory Council, Ruby Farms, Irrigation Water Management Service, Mourning Dove Farms, Walker Farms, Pratt Farms, Goldman Dairy, & AMS Insurance

Other Accomplishments

Eloy NRC, and two other NRCs, provide assistance to our producers through the Irrigation Management Service (IMS). We oversee the IMS staff who visit farms during the year to help producers make sure their irrigation practices continue to be the most efficient and cost effective. Different types of evaluations are conducted, from checking moisture content and water flow to performing a full crop-year evaluation.



Testing soil moisture



Newly lined irrigation ditch

MORE WORK TO DO

- Provide direction to the Irrigation Management Service (IMS) staff in their monitoring and assessment of irrigation techniques for 174 farms in the BMP program covering 89,200 acres; facilitate three workshops to assist with ADWR water reports and BMP paperwork. Monitor IMS as they do four irrigation evaluations monthly for BMP participants on a rotating basis, as IWM data for NRCS, and as they complete deliverables for ADWR contract.



FLORENCE-COOLIDGE CONSERVATION DISTRICT

Chair: Scott Riggins

Vice Chair: Marcus L. Martin

Phone Number: 520-836-1960 Ext. 3

Email Address: e_fc_wpnrcd@yahoo.com

Legislative District: 8

Congressional District: 1 & 4

Acres: 265,964

2019 Accomplishments

Water Out West is one of six programs offered by NATURAL RESOURCE EDUCATION CENTER (NREC). The Water Out West program educates students about water availability and conservation habits. The students experience four different hands-on stations, including water management, history, hydroelectricity, the power/destructiveness of water, and the water cycle. These programs are Legg's Get Crack'n K, Alfalfa to Ice-Cream 1st, Veggie Ventures 2nd, Corn Festival 3rd, AZ Five Cs 4th, Water Out West 5th grade, Project Wet 4th grade, and Careers in Water Pinal County high schools. NREC has developed their own curriculum for the different programs and centers, including using Project Wet and Backyard Conservation.



Ditch lining

Project summary and results:

The Water Out West program reached 353 students for 1,412 student educational hours. Pre/Post evaluations showed post class knowledge percentages in the 90% range.

Key Partners:

Arizona Department of Agriculture, Local Natural Resource Conservation Service, University of Arizona, Arizona Public Service Electric Company, & local producers



Solar tin can car

Other Accomplishments

We have the teachers and producers give us feedback on our program and field days. They are always impressed with the amount of information that is made available in an understandable way. One teacher from Heartland Ranch Elementary whose class attended 'The 5 Cs of Arizona', summed up the frequent response when she wrote, "We had more learning in one day than we could get in the classroom in a week."

MORE WORK TO DO

- Help producers in Pinal County determine the most effective techniques on their farms to achieve maximum efficiencies with existing systems



FREDONIA CONSERVATION DISTRICT

Chair: Brent Mackelprang **Vice Chair:** Shane Button

Phone Number: 928-643-7304

Email Address: rm.fredonianrccd@gmail.com

Legislative District: 5 & 7

Congressional District: 1 & 4

Acres: 3,086,415

2019 Accomplishments

The Jacob-Ryan USFS Project addressed pinion-juniper tree community that was crowding out natural grasses and affecting both wildlife and cattle forage opportunities. The project included:

- seeding by plane with native grass and shrubs
- using mastication for tree and brush removal while leaving stands of trees for the wildlife

The project success was assisted by strong winter and spring moisture along with decreased competition allowing for the seeds to germinate. Said David Johnson, "The Jacob-Ryan USFS Project is by far the best project that I have been involved in. There is a good stand of grasses, deer have been seen grazing in the area and my cattle will benefit as well. Thanks to all the agencies for their help".

Project summary and results:

This project covered approximately 800 acres of Kaibab National Forest landscape. Ten field trips have occurred at this project site hosted by Natural Resource Conservation District Supervisors, U.S. Forest Service, Arizona Game & Fish Department, and Natural Resource Conservation Service staff.

Key Partners:

Fredonia Natural Resource Conservation Service, Bureau of Land Management, Kaibab National Forest Service, & Arizona Game & Fish Department



Above: Land managers observing the results of the Jacob-Ryan USFS Project mastication project.

Below: Decreased competition for the newly seeded landscape.



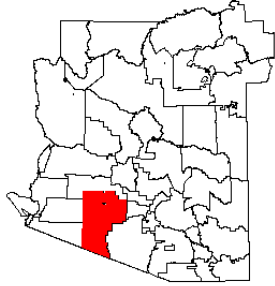
Landowner investigating the large infestation of Scotch thistle on his land. He always participates in our Weed Day. He says there is no other way to get on top of the problem except consistent spraying.

Other Accomplishments

Scotch thistle is an invasive species. Our district has organized the Annual Weed Day for many years, agencies, landowners and volunteers come together for one day and spray this weed. We used a district owned 6x6 with a boom and sprayer as well as a backpack. Other agencies bring similar equipment. Our district provides the chemical for everyone to use. This is an on-going effort, as it will take years of consistent effort to eradicate these noxious weeds.

MORE WORK TO DO

- Develop reliable water every three miles for wildlife and livestock
- Treat approximately 5,000 acres of pinion-juniper trees



GILA BEND CONSERVATION DISTRICT

Chair: Tyson Stuhr

Vice Chair: Mark Skousen

Phone Number: 623-386-4631

Email Address: gilabendnrcd63@gmail.com

Legislative District: 4 & 13

Congressional District: 3

Acres: 3,026,702

2019 Accomplishments

Arizona state law requires certification to safely handle pesticides. Our district facilitates a program that provides hands-on training and certification by a qualified trainer from the Arizona Department of Agriculture. Participants receive a valid certification that is good for one year.



Project summary and results:

- Sixty farm workers from local dairies and farms participated in the training.
- During the 2018-2019 school year, our district co-sponsored 5,215 student contacts by the BUCKEYE VALLEY CONSERVATION EDUCATION CENTER within Buckeye Elementary, Sundance, Inca, and Jasinski schools, as well as Gila Bend schools including Sentinel, Kaiser, and Ajo.



Key Partners:

Natural Resources Conservation Service, Bureau of Land Management, Arizona Game & Fish Department, Buckeye Valley NRC, D,

Other Accomplishments

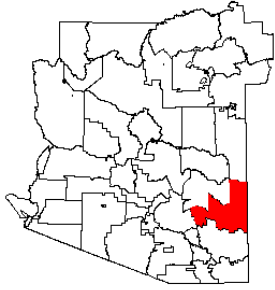
Each year, the district supports the Arizona State Envirothon, an important natural resource competition for high school students. Topics of the competition include aquatic ecology, soils and land use, forestry, and wildlife. The program objectives are to promote environmentally-sound solutions to protect our natural resources. Sixty Arizona students participated in the Envirothon camp this past year.

Every year this district funds a field trip for one or more local elementary schools to participate in agricultural festivals at local farms. The Board also supports the AZ Foundation for Ag Literacy Program and Natural Resource Conservation Workshop for Arizona Youth (NCWAY).

The district partnered with the Town of Gila Bend on a Pima (Hwy 85) Streetscape project, a street beautification venture using low-water use xeriscape plants, planned for a 2020 completion.

MORE WORK TO DO

- Our district plans to purchase and install signage on its boundaries by contracting with a local high school to manufacture the signs.
- Complete the district long-range plan.



GILA VALLEY CONSERVATION DISTRICT

Chair: Dean Lunt

Vice Chair: Scott Alder

Phone Number: 928-428-5537

Email Address: amy.herbert@az.nacdnet.net

Website: <http://facebook.gilavalleyncrd/>

Legislative District: 7 & 8

Congressional District: 1 **Acres:** 2,373,993

2019 Accomplishments

Agriculture plays an important role in our local community and economy. Therefore, the management of land within the district to ensure the sustainability of agriculture is crucial. The Gila Valley NRCDC partnered with the Gila Valley Irrigation District to obtain grant funding to conduct a Rapid Appraisal of the irrigation system. The purpose of this project was to complete a rapid assessment that identified key factors related to irrigation water control in the Gila Valley, define the level of water delivery service provided to users, and examine specific hardware, infrastructure, management techniques and processes used in the control and distribution of water. This assessment will provide stakeholders with the data needed to prioritize improvement projects and seek funding.

Project summary and results:

Our goal was to identify and address natural resource concerns on local agricultural lands by promoting natural resource conservation programs, and by providing direct technical assistance to the local USDA NRCS office in administering farm bill programs to enable local land users and managers apply practices to address natural resource concerns. We accomplished this by entering into a cooperative agreement with NRCS which enabled us to provide a technical assistant for 1,444 hours to work directly with the Safford NRCS Field Office. This fiscal year, we were able to assist with planning conservation practices on 14 farms (1,170.3 acres) and 9 ranches (142,792 acres). We also assisted directly with applied practices on 18 farms (1,531.2 acres) and 3 ranches (43,690 acres).

Key Partners:

USDA Natural Resource Conservation Service, Gila Valley Irrigation District, & University of Arizona Cooperative Extension



Dirt carry ditch with soil erosion



Sedimentation and overgrown vegetation in canal



Newly installed concrete notched ditch for irrigating farm fields



Top: University of Arizona Cooperative Extension provided a presentation on a do-it-yourself rain gauge design at the Rangeland Monitoring Workshop



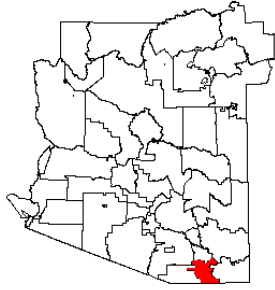
Right: Dustin Hancock of the University of Arizona Cooperative Extension, demonstrates how to assemble the rain gauge at the Rangeland Monitoring Workshop

Education Center

GILA VALLEY ENVIRONMENTAL CENTER— Providing the local community with outreach and education on the importance of improving and modernizing the irrigation delivery system enables them to understand the importance of water conservation and irrigation efficiency. We reached 248 community members including 24 at the U of A Cooperative Extension Rangeland Monitoring workshop that we were able to sponsor. This workshop focused on best practices for rangeland monitoring, an on-line tool to manage and interpret precipitation data, and featured a demonstrate on a do-it-yourself rain gauge design.

MORE WORK TO DO

- Host or sponsor a minimum of 1-2 workshops, community events, or field days.
- Provide funding for a local youth to attend the annual NRCWAY camp
- Provide classroom presentations and/or curriculum to local schools on natural resource conservation topics.



HEREFORD CONSERVATION DISTRICT

Chair: John Ladd

Vice Chair: Lucinda Earven

Phone Number: 520-456-5938 or 520-604-8217

Website: www.herefordnrzd.com

Legislative District: 14

Congressional District: 2

Acres: 594,538

2019 Accomplishments

Horseshoe Draw is a completed project addressing water recharge to the San Pedro River, it is also an ongoing monitoring program. Because of the remote physical site of this project, and partnership with the Cochise Conservation & Recharge Network's (CCRN) Palominas Water Recharge Project, Hereford NRCD organized a tour of both projects. The tour included guided site visits followed by a discussion about water recharge during lunch.

Hereford NRCD co-hosted (with Whitewater Draw NRCD) a workshop for the general public to explain the use of drones in agriculture, agricultural projects and resource management. Program highlights included speakers from Natural Resource Conservation Service, University of Arizona, private company drone users, and the district.

Project summary and results:

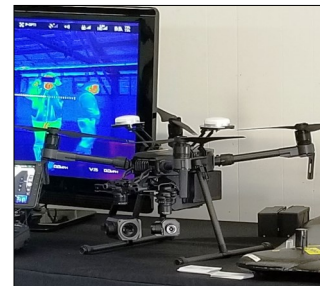
Over 50 Arizona State legislators and others attended the Water Recharge tour. The large Drone Workshop turnout emphasized the use of drones as developing technology that cannot and should not be ignored.

Key Partners:

Arizona Department of Environmental Quality, AZ Water Protection Fund, Howard G. Buffett Foundation, Cochise County, Cochise Conservation and Recharge Network, Whitewater Draw NRCD, & The Nature Conservancy



John Ladd demonstrating a typical sized drone



Close up of a drone



Cattle at the productive Horseshoe Draw located on the Ladd Ranch.



Tombstone High School FFA students

Education Center

HEREFORD CONSERVATION & ENVIRONMENTAL EDUCATION CENTER—Tombstone High School is the only school within the District that has an active agriculture and Future Farmers of America (FFA) program. Hereford NRCD supervisors believe helping the students in FFA whose interests lie in agriculture, thus natural resources, is a very beneficial educational tool. The rural communities include Sierra Vista, Tombstone, Huachuca City, Whetstone, Palominas, Hereford, Bisbee, and Naco.

MORE WORK TO DO

- Continue the range/ranch restoration and resource management of water and soil by utilizing brush management, incorporating grassland restoration and increasing solar use.



LAGUNA CONSERVATION DISTRICT

Chair: Sheryl Christenson **Vice Chair:** Bruce Easterday

Phone Number: 928-783-5735

Email Address: conservationgarden@gmail.com

Legislative District: 4 & 5

Congressional District: 4

Acres: 1,347,091

2019 Accomplishments

In order for our district to utilize and protect the natural resources under our control, we hosted a workshop with Natural Resource Conservation Service (NRCS), Arizona Game and Fish Department (AZGFD), Bureau of Land Management (BLM), and Arizona Association of Conservation Districts (AACD) that provides land management practice information.

We also service local schools and the public by providing access to a botanical garden, a ground water display unit, and information about water, soil, native species, and the water cycle. We also host the birding festival.

In addition, the garden is available for local photographers, allowing a local photography location to be highlighted at the fair with whom we share management.



Project summary and results:

- We had 351 hours of work accomplished with seven volunteers reaching six school districts with a total of 7,199 contacts.
- We had a grant that paid teachers \$100 each to write lesson plans for our Ed Center. We hosted two sessions for them to write the grant and work with other teachers.
- The Ed Center has 51 lesson plans online at www.yumaconservationgarden.org

Key Partners:

Yuma Community Foundation, University of Arizona (UofA), Arizona Game & Fish Department (AZGFD), Farm Bureau, Yuma County Fair, County of Yuma, City of Yuma, Yuma Proving Grounds, U.S. Army, Yuma Natural Resource Conservation District

Education Center



Groundwater display unit being used for a class



Teacher training at Yuma Conservation Garden

- YUMA CONSERVATION GARDEN ED CENTER provides environmental education that encourages responsible stewardship of our natural resources
- We have used the nationally known environmental programs to design Ed Center lesson plans. Project WET has provided ground water display units for the Ed Center. We work with the UofA, Bureau of Land Management, and AZGFD.

MORE WORK TO DO

- Signage is an ongoing need as signs have been cracking within one year because of the intense heat and strong sunlight. Therefore our district is searching for financial support to replace the existing signs.



LITTLEFIELD-HURRICANE VALLEY CONSERVATION DISTRICT

Chair: Ed Bundy

Vice Chair: Kolter Layton

Phone Number: 435-632-6543

Email Address: lhvnrcd@infowest.com

Legislative District: 5

Congressional District: 4

Acres: 1,995,702

2019 Accomplishments

In the mid 1970's, due to the listing of the desert tortoise as an endangered species, livestock grazing was a contentious issue in northern Arizona. Both ranchers and management agencies asked the University of Arizona Cooperative Extension and the Utah State University Extension to provide a science-based workshop for land managers and the public to improve knowledge and understanding of the issues. Our district has annually promoted and participated in the workshop and has two main objectives:

- to assist producers in providing reliable water sources
- to assist in improving plant condition, especially controlling noxious and invasive plants and weeds

Project summary and results:

Success of this long running workshop is due to excellent partnerships and collaboration, industry sponsors, discussion of current and controversial issues, and effective evaluations. Some of topics from the 2019 workshop were: Range Water Solutions, Feed Management on the Range, and Rancher Project Highlights. A panel of ranchers told of their successes, such as completing water catchments and storage tanks, as well as implementing pinion-juniper and brush treatments on their ranches.

Key Partners:

Utah State University Extension, University of Arizona Cooperative Extension, Natural Resources Conservation Service, Bureau of Land Management, & Kaibab U.S. Forest Service



Largest attendance ever at the 2019 annual workshop with about 300 participants



Other Accomplishments

The Arizona Strip relies almost entirely on rainfall to fill water management projects such as ponds, water harvesting catchments, watering facilities, spring developments, pond sealing and lining, pumping plants, and pipelines to provide livestock and wildlife water. We are assisting producers in their collaboration with NRCS to provide reliable water sources every three miles on the 'Strip'.

MORE WORK TO DO

- By maintaining an on-going seed trial, the district's goal is to find a perennial that will grow in the loamy bottom areas, and withstand the periods of drought
- Plan a biannual Weed Day in the spring and fall and rent district equipment



NAVAJO COUNTY CONSERVATION DISTRICT

Chair: Francis Perkins

Vice Chair: Ethan Ellsworth

Phone Number: 928-524-2652

Email Address: Sharon.fisher@az.nacdnet.net

Legislative District: 7

Congressional District: 1

Acres: 16,343,497

2019 Accomplishments

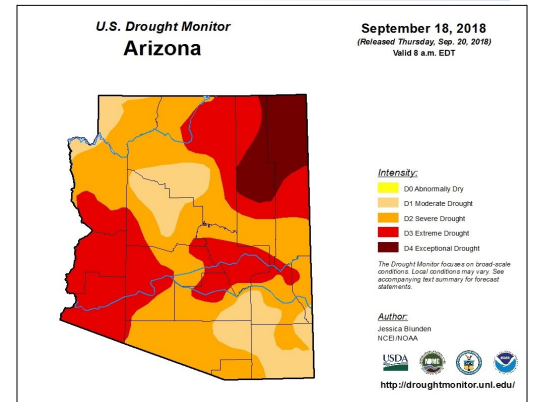
Our district collaborated in a multi-agency Emergency Response to a 2018 natural disaster, long-term drought, that was declared by the federal Department of Agriculture. At a district meeting, we facilitated the sharing of information with local producers focusing on an aerial seeding to decrease erosion due to an extreme loss of native grasses. The qualifying landowners had to document a loss of 80% or greater of vegetation loss to Natural Resource Conservation Service. This was a cost-share agreement, including participation by land owners requesting the seeding.

Project summary and results:

- This project has established five monitoring points for data analysis after the aerial seeding, which will occur fall of 2019, within the Navajo Natural Resource Conservation District (NRCN). Monitoring will also be conducted on Arizona State Trust Land.
- Aerial seeding for the district is projected to be 15,985 acres over state and private lands.

Key Partners:

Arizona State Land Department, Natural Resource Conservation Service, Arizona Department of Agriculture, local land owners and managers, Tucson Plant Materials Center, Arizona Game & Fish Department, U.S. Forest Service, & Bureau of Land Management (BLM)



Above: Approximately 3,850,000 acres have been identified as having 50 – 100% reduction in vegetative production compared to a 34 year mean

Below: Range with a loss of more than 80% gramma grass



Other Accomplishments

- The district supported the Society for Range Management (SRM) state-wide 2019 summer meeting in Show Low, AZ.
- The district encouraged producers to apply for Natural Resource Conservation Service EQIP and BLM Healthy Lands program funds to accomplish brush mastication on 3,400 acres of Arizona State Trust Land.

MORE WORK TO DO

- Collaborate with adjoining districts to support our local school children with natural resource information



PARKER VALLEY CONSERVATION DISTRICT

Chair: Ray Martinez

Vice Chair: Calvin Laffoon

Phone Number: 928-669-9826 Ext. 5

Mail Address: P. O. Box 3366, Parker, AZ 85344

Legislative District: 5

Congressional District: 4

Acres: 264,047

2019 Accomplishments

Our district focused on assisting the Colorado River Indian Tribes (CRIT) in improving irrigation efficiency and productivity of the land. Current irrigation efficiency ranges from 30-60%. The long range goal is approximately 70% irrigation application efficiency.

In addition, we identified a need to initiate a Farm Bill Policy change that will eliminate the two-out-of-five year irrigation history policy and replace it with a one-out-of-20 year irrigation policy.

Project summary and results:

Parker Valley Natural Resource Conservation District (NRCD) facilitated a meeting focused on funding sources and partnerships available to accomplish the Tribes long range goals. The meeting brought together representatives from CRIT, Natural Resource Conservation Service (NRCS), Bureau of Reclamation, Bureau of Indian Affairs and NRCD. A beginning project was identified and a Memorandum of Understanding between CRIT, NRCS and NRCD and is in the development process.

Key Partners:

Colorado River Indian Tribes, Natural Resource Conservation Service, Bureau of Indian Affairs, & Bureau of Reclamation



CRIT Irrigation System - unlined canal



Improving irrigation efficiency on irrigated croplands with lined canals



USDA Farm Bill Policy changes affects fallow land



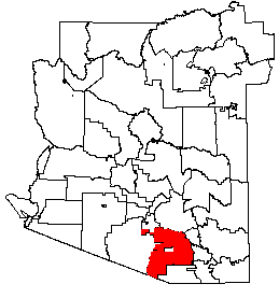
A portion of the FFA Land Lab Day program is directed toward pre-high school students to develop their interest in the FFA and 4H programs.

Education Center

PARKER VALLEY EDUCATION CENTER—"The future of agriculture is our youth. Parker Valley promotes education of youth through workshops and providing a facility for the youth to house their fair animals," said Rudy Buckelew, a local farmer and member of CRIT Irrigation Committee.

MORE WORK TO DO

- Educate high school students in agricultural skills, i.e. soil judging, entomology, irrigation water management, watershed concepts, weed identification



PIMA CONSERVATION DISTRICT

Chair: Jim Chilton

Vice Chair: Cindy Copping

Phone Number: 520-220-1221

Email Address: clerk.pimanrcd@gmail.com

Website: <https://pimanrcd.wordpress.com/>

Legislative District: 11 & 14

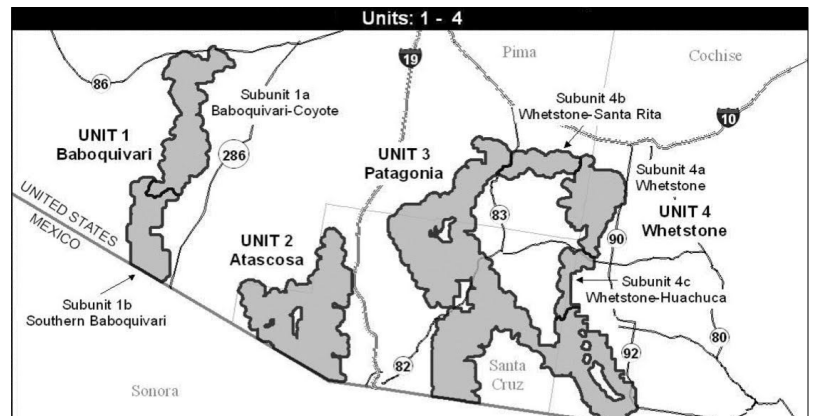
Congressional District: 1, 2, & 3

Acres: 2,138,267

2019 Accomplishments

In 2018, the U.S. Fish and Wildlife Service proposed to repeal its 2016 critical habitat rule. Our district submitted comments asserting the 2016 rule might trespass the limits Congress placed on the Endangered Species Act in 1986. We cited legal experts Norman James and Thomas Ward who wrote,

"A reassessment of the role of critical habitat is needed to ensure that the regulatory and judicial treatment of critical habitat conforms to the intent of Congress." - 2016, UCLA Journal of Environmental Law and Policy, "Critical Habitat's Limited Role Under the Endangered Species Act and Its Improper Transformation into "Recovery" Habitat".



A reassessment of the role of critical habitat is needed to ensure that the regulatory-judicial treatment conforms to Congressional intent

Project summary and results:

The District submitted comments supporting the proposed repeal of the 2016 critical habitat rule. We posted our comments on the Pima NRCD website (See <https://wp.me/P6t0C9-9i>).

Key Partners:

Dennis Parker (Biological and former legal consultant), Santa Cruz Natural Resource Conservation District, Chino Winds Natural Resource Conservation District, Big Sandy Natural Resource Conservation District, Southern Arizona Cattlemen's Protective Association, Arizona Cattlemen's Association



U.S. Fish & Wildlife Service photo of a Pima Pineapple cactus

Other Accomplishments

Four biologists individually told us that decades of monitoring data suggest grazing exclosures seriously harmed some local endangered species. In 2019 the Coronado Forest (CNF) began planning to update its grazing policies. The Pima Center for Conservation Education provided the CNF grazing applicants with a specialist's comments on three endangered plants. The ranchers then worked with CNF to correct harmful policies. We posted the expert's comments on the Pima NRCD/PCCE website (See <https://wp.me/P6t0C9-bd>).

MORE WORK TO DO

- Publish four quarterly newsletter
- Recruit contractor to raise funds to assess current needs, apply for grants



REDINGTON CONSERVATION DISTRICT

Chair: Andrew Smallhouse **Vice Chair:** Jess Barry

Phone Number: 980-721-6376

Email Address: redingtonnrcd@gmail.com

Legislative District: 14

Congressional District: 1 & 2

Acres: 285,860

2019 Accomplishments

The SolRhea rangeland and soil improvement project will help to better manage the range by providing increased water distribution. This will in turn help sustain native grasses and decrease soil erosion. It will also provide water sources to support wildlife populations including big horn sheep, whitetail deer, black bear, mountain lions, and rabbits.

In addition, we are rebuilding Charcoal Dam, a failed Civilian Conservation Corps (CCC) dam below the Galeria Mountains. Charcoal Dam will slow down the water flow, reducing erosion and increasing water infiltration within the San Pedro Watershed.



Newly installed high elevation water tanks



Erosion occurring below the Charcoal Dam which needs to be repaired

Project summary and results:

The following projects were completed on the SolRhea project:

- over 3 miles of pipeline
- Four 3,000-gallon water storage tanks, strategically placed
- Three 800-gallon cement troughs
- Two high-elevation tanks to gravity feed lower tanks

The first step to repair the Charcoal Dam is to remove the mesquite on the dam. Second, we will use large machinery to rebuild the dam and create a spillway.

Key Partners:

Natural Resource Conservation Service, Big Horn Sheep Society, Winkelman Natural Resource Conservation District, San Manuel/Monmouth School District, Oracle Community Garden, & local landowners



Students obtain certification in artificial cattle insemination



Education Center

REDINGTON CONSERVATION EDUCATION CENTER provides range guide books, field trips within the district, and construction and water for school gardens. Our district also donated a hoop house to the Oracle Community Garden for local plant production and education.

“Our FFA Chapter is very appreciative of the support and donation that has been provided to send our students to the Riverview Dairy Seminar” said Lynn Woolever, a local teacher.

MORE WORK TO DO

- Continue to identify, fund, and complete projects that diminish soil erosion, improve watershed performance, and reduce impacts of land use



SAN PEDRO CONSERVATION DISTRICT

Chair: Sharon Reid

Phone Number: 520-586-3467

Email Address: bonniewilson230@yahoo.com

Legislative District: 14

Congressional District: 2

Acres: 362,061

2019 Accomplishments

District cooperator conservation needs were funded by the Farm Bill Environmental Quality Incentive Program (EQIP) with help from the Natural Resource Conservation Service (NRCS) Office in Willcox, AZ.

Our district hosted Mr. Bill Warskow's presentation titled 'Road to the Desert', providing information about conservation efforts on his ranch and attended by 10 participants.

For 2019 Earth Day, our district provided information to Pomerene School 5th - 8th grade students on the importance of water conservation, water harvesting, and soil improvement through composting.

Project summary and results:

The following district Resource Concerns were addressed for district cooperators thru EQIP:

- 2,700 acres of brush management
- 5 acres of sprinkler system
- 350 feet of irrigation pipeline
- 1,500 feet of fencing
- 1 flowmeter
- 1 watering facility
- 1 livestock well
- 1 solar pump
- 1 storage tank
- 1 acre of irrigation water management

Key Partners:

Natural Resource Conservation Services in Willcox, AZ



Typical substandard range on the San Pedro NRCD

Other Accomplishments

Students visited Kartchner Caverns to learn how caves are formed, the various formations within the cave, the habitat within the cave now, and who inhabited the cave years ago. They also learned about the plant habitat outside the cave, the animals that inhabit the desert around the cave and how the monsoons create erosion. Students were taught the importance of good soil, how to maintain and protect the cave for future generations, and the importance of protecting animal habitat in the area.



St. David School students visit Kartchner Caverns

MORE WORK TO DO

- Keep landowners with up-to-date information on legal issues by State Water Master
- Input on management decisions affecting SPRINKA, the local watershed, San Pedro River, adjacent land owners and neighbors
- To identify sources/occurrences of E. Coli to the river



SANTA CRUZ CONSERVATION DISTRICT

Chair: Stephen Williams

Vice Chair: Bill Schock

Phone Number: 520-220-1221

Email Address: clerk.scnrcd@gmail.com

Website: <https://santacruznrncd.org/>

Legislative District: 2

Congressional District: 3

Acres: 852,785

2019 Accomplishments

Rock dams are an ancient conservation method for controlling and reducing soil erosion. We use a method of One Rock Dams (ORDs) to stabilize the bed of the channel by slowing the flow of water, increasing roughness, capturing sediment, recruiting vegetation, and gradually raising the bed level over time. ORDs are also passive water harvesting structures. The single layer of rock is an effective rock mulch that increases soil moisture, infiltration, and plant growth.

Project summary and results:

Twelve ORDs were completed in two days on the Schock Ranch. See lower photograph which was taken on September 25, 2018 after heavy rains on the previous day. Water also ran on five additional days across the dam. Notice that silt, sand and gravel have almost buried the first two rows of rocks on the upstream side and vegetation is beginning to grow and fill in between the rocks.; these dams are achieving their desired purpose. Bill Schock, Santa Cruz Supervisor, said "Sportsman volunteers are an important labor source for the conservation project. The Quail Forever volunteers exemplify this with their work on the rock dams".

Key Partners:

Arizona Game & Fish and Quail Forever



Above: "Sportsman volunteers were an important labor source for on this conservation project."

Below: ORDs stabilize the bed of the channel: slowing the flow of water, increasing roughness, recruiting vegetation, and capturing sediment



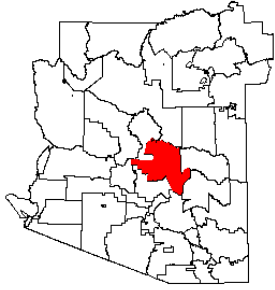
Students watching a presentation from the Project Wet curriculum

Other Accomplishments

The community Water Festival is part of a curriculum unit focused on water stewardship and STEM education and is sponsored by Santa Fe Ranch Foundation, U.S. Geological Survey, and SANTA CRUZ NRCD EDUCATION CENTER. In the 2018-2019 school year, 475 4th grade students from the Nogales Unified Schools District and Patagonia Elementary School District participated in the Arizona Water Festival Program. Students learned about watersheds, the water cycle, water conservation technology, and groundwater.

MORE WORK TO DO

- Conduct three One Rock Dam workdays during Fiscal Year 2020



TONTO CONSERVATION DISTRICT

Chair: Tommie Martin

Vice Chair: Terry Wheeler

Phone Number: 928-978-3153

Email Address: tontonrcd@gmail.com

Legislative District: 1, 6, & 23

Congressional District: 4

Acres: 2,280,808

2019 Accomplishments

The Reading the Range (RTR) program is critical to U.S. Forest Service as they do not have enough personnel to complete an ongoing need for range monitoring. In conjunction with the University of Arizona, the Tonto NRCDC became involved in a partnership to collect range monitoring data. This data will enable ranchers to keep cattle on Federal allotments and also provide courts with scientific and non-biased data.



Collecting vegetation data in one of the 27 Allotments (99 key areas) that were monitored including 7 allotments (30 new key areas) that hadn't participated in the RTR program before.

Project summary and results:

During the 2018-2019 year the district objective was to monitor all ranches with allotments in the Tonto National Forest (NF) for Natural Environmental Policy Act (NEPA) and data records. District rancher participation was 100%. Each rancher and Tonto NF Range Management Staff received a technical report that included a summarization letter interpreting the data (i.e. explaining if a change in vegetation occurred, precipitation information, summary of collected data, summary graphs with a yearly comparison, and information on forage species). The focus for the 2019-2020 RTR season and beyond will be ranches (29 allotments) that are outside the Tonto NF and not currently participating in RTR. Additionally, the district and University of Arizona hosted four rancher workshops with 201 attendees.

Key Partners:

Ranchers, University of Arizona, and U.S. Forest Service

Education Center



Rancher workshop hosted with the University of Arizona



A field day excursion during Ag Daze

TONTO NATURAL RESOURCES LEARNING CENTER—Ag Daze is our educational outreach program that explains natural resources and the important role agriculture plays in everyone's life. The objectives are to teach 6-8 lessons on mining, forestry, where food comes from to make a pizza, and range land health in schools. These topics are then translated into hands-on field days for youth, teachers, and community members. We reached approximately 900 community members the 2019-2020 year.

MORE WORK TO DO

- In an effort to continue the Tonto and Rye Creeks stabilization and the Tonto Creek crossing, our district will provide technical assistance to individual landowners, assist agencies with education about forest health and fire prevention and assist with stabilizing crop land in the Gisela area.
- The goal for the next five years is three workshops a year



TRIANGLE CONSERVATION DISTRICT

Chair: Shelley Blackmore **Vice Chair:** Tom Ritter

Phone Number: 928-713-7604

Email Address: dawn.salcito@usda.gov

Website: www.wycecaz.com

Legislative District: 1

Congressional District: 4

Acres: 1,474,596

2019 Accomplishments

Acting on concerns expressed by cooperators and landowners, Triangle NRCDC determined that valuable projects were delayed by cultural resource clearances. These delays had, at times, reached 7-10 years. Government agencies were unable to meet the demands of archaeological surveys required to implement brush control projects. Additionally, private landowners were financially restricted by the fluctuating cost estimates. Therefore, Triangle NRCDC raised private funds from the ranching community to apply for a National Association of Conservation Districts (NACD) Technical Assistance grant. With this grant, our district was able to hire a full time Cultural Resource Specialist. We have developed plans of work with the Natural Resource Conservation Service and Prescott National Forest Service to reduce wildfires, improve forest-stand health, support grazing management, establish watering facilities, and maintain tanks.



Granite Mountain foothills display dense pinon-juniper vegetation that increases fire severity.

Project summary and results:

In 2018-2019 our District Archaeologist was able to clear 28 projects that consisted of 1,296 acres.

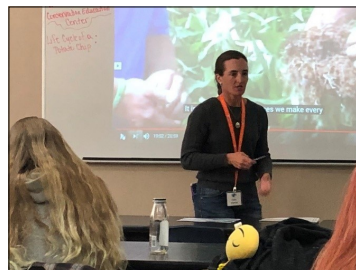
Key Partners:

Arizona Department of Agriculture, Arizona Department of Forestry and Fire Management, Arizona State Land Department, Local Government, University of Arizona, U.S. Forest Service, Triangle Natural Resource Conservation District, Chino Winds Natural Resource Conservation District, & Natural Resource Conservation Service

Education Center



Cassandra Manifee teaching in Prescott Valley in April 2019

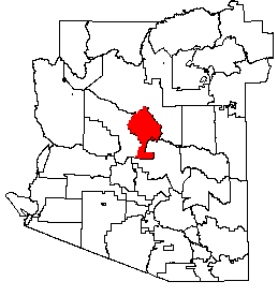


Dani Jean Lawrence at Chino Valley High School Teaching Careers in Agriculture.

WESTERN YAVAPAI CONSERVATION EDUCATION CENTER (WYCEC) - Hires five staff to teach agricultural importance in 10 rural communities, improving the overall understanding of what it takes to get food on a plate. Discussion involve soil health, water usage, water recharge, historic grassland maintenance, forest health, and the roles of consumers and producers. This year we reached 8,879 students.

MORE WORK TO DO

- Triangle NRCDC has applied for and received a second year NACD grant to continue cultural resource surveys. Our goal this coming year is to partner with more government agencies and increase our survey acreage.



VERDE CONSERVATION DISTRICT

Chair: Chip Norton

Phone Number: 602-903-2436

Email Address: nrcdverde@gmail.com

Email for Verde NRCDE Environmental Education Center: <http://vnrcdeec.org>

Legislative District: 1 & 6

Congressional District: 1 & 4

Acres: 1,311,297

2019 Accomplishments

Adequate water supply is one of the major challenges facing landowners in the Verde Valley. Our goals are to improve irrigation efficiency and to conserve water resources, enabling us to preserve our heritage as an agricultural hub in the state.

Project summary and results:

The Verde NRCDE worked with multiple private landowners to improve irrigation systems. The process included identifying landowners in need of assistance, facilitating partnerships with Natural Resource Conservation Service (NRCS), assisting landowners in developing conservation plans, and identifying funding sources. In addition, we met with the community and local officials about water conservation in 11 collaborative meetings.

"It's amazing to see the work that is being accomplished in the Verde through the collaboration of partners and landowners working towards the same goals" said Shai Schendel, District Conservationist, Natural Resource Conservation Service.

Key Partners:

The Nature Conservancy, Natural Resource Conservation Service, District Conservationist, Camp Verde Public Library, Town of Camp Verde, Friends of the Verde River, U.S. Forest Service, Verde River Growers, Local Ditch Associations, Bureau of Reclamation, University of Arizona Extension Office, & Yavapai-Apache Nation



Agriculture in the Verde River



Community members joined the Verde NRCDE Board for the first annual fund raiser with wine tasting and a silent auction where they heard a presentation about the Ed Center.



Verde Valley Natural Resource Conservation District



Students collecting data to calculate the cubic feet per second (flow) of the Verde River at Dead Horse Ranch State Park



8th grade students testing effluent water from Clarkdale Waste Water Treatment Center

Education Center

VERDE NRCDE ENVIRONMENTAL EDUCATION CENTER —"The Properties of Water Program has immeasurable benefits for our education and sense of community at Camp Verde Middle School. The positive impact of this program can never be overstated," said Mrs. Koepp of Camp Verde Middle School. The program provides sustainable agriculture and water conservation education to K-8 grade students, educators, and community members within the Verde Valley.

MORE WORK TO DO

- Maintain sustainable water flow in the Verde River through conservation, technology and education.
- Improve irrigation efficiency and leverage funds to implement projects that restore continuous flows to the Verde River. Our goal is to restore continuous flow of 20 cubic feet per second (CFS) for the Verde River above the confluence with Oak Creek and to restore continuous flow of 30 CFS below the confluence.



WELLTON-MOHAWK VALLEY CONSERVATION DISTRICT

Chair: David Sharp

Vice Chair: Gregory Marlatt

Phone Number: 928-210-7169

Email Address: samclaurin@aol.com

Legislative District: 13

Congressional District: 3 & 4

Acres: 1,390,940.3

2019 Accomplishments

Wellton-Mohawk NRCD collaborates with multiple educational outreach programs, listed below:

- **Natural Resource Conservation Workshop for Arizona Youth (NRCWAY)**—Encourages young people to consider careers in environmental sciences
- **Summer Ag Institute** — Takes educators from around Arizona (many of them come from non-agriculture states) to show them different aspects of Arizona agriculture
- **Arizona 4-H Youth Summit** — Brings students from rural areas to the University of Arizona and highlight what kind of agricultural and other opportunities are available when attending college

Project summary and results:

These programs made a total 4,789 contacts at the Wellton Elementary School, Mohawk Valley Public School, Hyder School District, Antelope Union High School, and in the rural Arizona communities of Wellton, Roll, Tacna and Dome Valley. In addition, our district has supported the Environmental Science & Natural Resources Proficiency Award. Kayla Reddy, an AZ FFA winner stated “Thank you for the recognition of my work”.



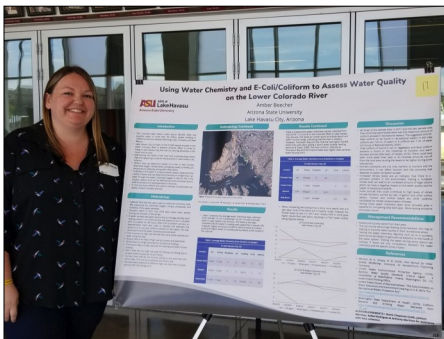
Kayla Reddy, AZ FFA State winner of the Environmental Science & Natural Resources Proficiency Award.



Teachers who participated in the 2019 Summer Ag Institute

Key Partners:

Arizona Department of Agriculture, Arizona Department of Environmental Quality, Arizona Department of Water Quality, Arizona State Land Department, Bureau of Land Management, Local Natural Resource Conservation Service, University of Arizona, & USDA Agricultural Research Service



Presentation shown during the AZ/NV Academy of Science

Education Center

WELLTON-MOHAWK VALLEY NRCD EDUCATION CENTER—The Arizona/Nevada Academy of Science offered the opportunity for college students studying science to participate in a conference that highlights careers in science related to agriculture and the environment. Eighty students participated in breakout sessions, lighting talks, poster sessions, and awards.

MORE WORK TO DO

- Collaborate with other organizations to encourage young people to raise and show large animals in order to teach them good animal husbandry and stewardship



WEST PINAL CONSERVATION DISTRICT

Chair: Phillip Hartman

Vice Chair: Fred Diwan

Phone Number: 520-836-1960

Email Address: e_fc_wpnrcd@yahoo.com

Legislative District: 8 & 11

Congressional District: 1

Acres: 412,024

2019 Accomplishments

Water in the Southwest is approaching crisis level and Pinal County has been particularly hard hit with the drought. It is essential that agriculture survives in Pinal County and Arizona for economic and social benefits. The Irrigation Management Systems (IMS) program assists producers by assessing their systems and implementing any necessary changes and is supported by our and other districts.

To that end, producers need to determine the most effective irrigation techniques. For example, lined ditches and land leveling to achieve maximum irrigation efficiency with existing systems and current water availability and costs.

Project summary and results:

During the year, IMS staff:

- performed four turf evaluations, 14 standard crop evaluations, and six seasonal (full crop year) evaluations
- provided season-long education and training in water management for individual producers during field visits
- assisted the producers with their annual water reports through three workshops

Key Partners:

Arizona Department of Water Resources, Natural Resource Conservation Service Casa Grande Field Office, Groundwater Users Advisory Council, Florence-Coolidge Natural Resource Conservation District, & Eloy Natural Resource Conservation District

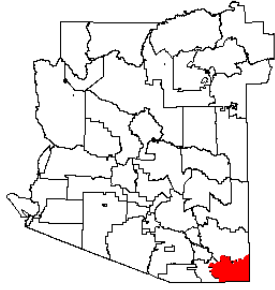


Other Accomplishments

In partnership with two other districts, our district provides field equipment and maintenance as needed to plant four acres of a demonstration farm at the local community college.

MORE WORK TO DO

- Work with local entities to maintain Santa Cruz drainage canals by facilitating three meetings with local entities to determine responsibility of canal maintenance sections. Work with local entities to guide land use planning.
- Endorse air/water quality protection/improvement efforts in the Casa Grande -Coolidge Hydrologic Unit Area. Endorse the Sonoran Desert Tortoise Conservation Plan.



WHITEWATER DRAW CONSERVATION DISTRICT

Chair: Fred Davis

Vice Chair: Frank Krentz

Phone Number: 520-642-1951

Email Address: whitewaterdraw@gmail.com

Legislative District: 14

Congressional District: 2

Acres: 1,169,429

2019 Accomplishments

The City of Douglas has problems with soil erosion caused by an influx of mesquite, creosote, and White Thorn. This creates major problems in the city. The city and the Cochise County Supervisors have proposed over a million dollars in dirt work to combat this problem. Gerry Gonzalez, past District Conservationist in the Douglas Field Office, stated "In the case of this proposed project, when it is completed, then the extensive dirt work may not be necessary at all. It could save Cochise County a lot of money." He suggested to our board that we work on a project to recommend aerial brush application to kill these invasive plants as the soil erosion is causing major damage to city streets and beyond.



Project summary and results:

Fixing the problems with erosion will vastly reduce flooding of city streets and runoff into Mexico. We are in the research phase of this massive project, currently collaborating with all affected parties **affected parties are whom? Residents of MX and Douglas**

Key Partners:

Natural Resource Conservation Service Field Office, City of Douglas, & Cochise County landowners



Pat Call explains the aerial view from a drone showing the difference between before and after treatment



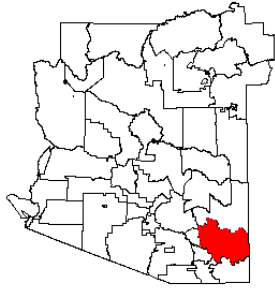
Mary Darling explains use of drones activities such as fence inspection, flood inspection, thermal imaging for livestock, imaging from fires, etc.

Other Accomplishments

Invasive brush crowding out grasslands is a serious problem affecting all farmers and ranchers in the Whitewater Draw NRCD. We cooperated with Hereford Natural Resource Conservation District to provide education on the advantages of drone monitoring. Objectives were to educate our cooperators by showing aerial views focusing on grass improvement and the serious decline in invasive brush.

MORE WORK TO DO

- Our district is collaborating with NRCS to relocate both our offices. Currently we are all housed at the Douglas airport. We want to provide a more accessible meeting space and a place to conduct and plan our work projects.



WILLCOX-SAN SIMON CONSERVATION DISTRICT

Chair: Larry Parker

Vice Chair: Timmothy Klump

Phone Number: 520-507-2220

Email Address: willcoxsansimonnrzd@vtc.net

Legislative District: 14

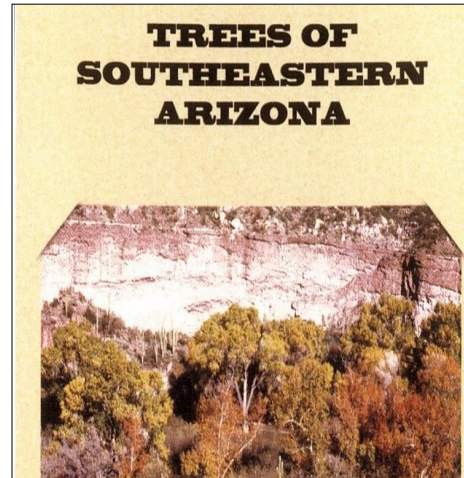
Congressional District: 1 & 2

Acres: 2,145,846

2019 Accomplishments



Riggs Field Day—This event has been going on for 47 years and is a great opportunity for area FFA students to compete in wildlife, range and soils competitions.



Field Guide Sales—Field guides are important for residents and producers in the southwest to help them identify and explore fauna. This is one of nine titles offered by the Willcox-San Simon NRCD and generates funds for our district.

Project summary and results:

Our education program reached 820 participants, some of whom attended Riggs Field Day. We reached students within the rural communities of Willcox, Bonita, Cochise, Pearce, San Simon, and Bowie.

The Page Bakarich Scholarship honors Mr. Page Bakarich, who was an outstanding Ag Ed teacher in Willcox and a long-time member of the WSS NRCD board. An anonymous donor in 2015 contributed to the fund along with donations from cooperators. This year we awarded the scholarship to nine youth in the community who are pursuing a future in conservation of agriculture.

Key Partners:

Willcox Natural Resource Conservation Service, Arizona Game & Fish Department, U.S. Forest Service, Bureau of Land Management, AZ Land & Water Trust, Arizona Association of Conservation Districts, National Association of Conservation Districts, & Arizona State Land Department

Other Accomplishments



Each year, the district chooses a Cooperator that does an exceptional job at conservation on their farm or ranch. Cooperators are ranked based on their cooperation with the NRCD, NRCS, and input of their own to support conservation efforts.

On the far left is Jesse Davis, the 2019 recipient of the Rancher of the Year Award with Tina Thompson and Tedd Haas, both Supervisors of the district. The photograph is taken in front of the historic Sierra Bonita Ranch Headquarters in Bonita, Arizona.

MORE WORK TO DO

- The Willcox-San Simon NRCD partners with the Willcox NRCS Field Office to fund a Technical Service Provider (TSP) position to assist in administration of NRCS programs and assist the district.
- The Willcox-San Simon NRCD proudly supports the annual Chiles Field Day at Curry Farms to promote agricultural education.



WINKELMAN CONSERVATION DISTRICT

Chair: Bill Dunn

Vice Chair: Steve Turcotte

Phone Number: 520-220-1221

Email Address: clerk.wnrncd@gmail.com

Legislative District: 7, 8 & 11

Congressional District: 1 & 2

Acres: 1,609,376

2019 Accomplishments

Our district received Arizona Game and Fish Habitat Partnership Committee (HPC) funds that are designed to facilitate local decision making regarding wildlife habitat issues and improvements. Our project used seepage control chemical, ESS-13, which “is much more effective and less costly than using bentonite soil”, said Steve Turcotte, a cooperator and Supervisor of the district. The practice of lining stock tanks will provide a renewable water supply for cattle and wildlife by minimizing ground seepage at tanks in the San Pedro watershed, which has little wildlife water. This program will allow for the cleaning, maintenance, and sealing of dirt stock tanks in the lower San Pedro watershed, a primary source of water for wildlife and cattle.

Project summary and results:

- One demonstration tank was completed
- Led tours of the completed tank



Key Partners:

Arizona Game & Fish Department, Seepage Control Inc, & Oracle Community Learning Garden

Other Accomplishments

National Association of Conservation Districts awarded \$50,000 to the Oracle Community Learning Garden as a district demonstration hub, enabling three goals: hoop house installation, community-wide vermicomposting system, and a water conservation system. There are no plant nurseries in Oracle, and the nearest plant nurseries generally don't grow native plants suitable for the local climate and soil type. There is a large need within the district for locally-grown native plants that can be used for restoration. This project will serve the rural communities and school districts of Kearny, Mammouth, San Manuel, and Oracle .

MORE WORK TO DO

- The district applied to Arizona Department of Forest and Fire Management and the Water Protection Fund for monies to treat tamarisk within the district boundaries for Fiscal Year 2021.



YUMA CONSERVATION DISTRICT

Chair: Mark Kuechel

Vice Chair: Barbara Snow

Phone Number: 928-783-5735

Email Address: Sheryl.christenson@az.nacdnet.net

Legislative District: 13

Congressional District: 3

Acres: 1,171,451

2019 Accomplishments

PM10 Negotiation—Under the Clean Air Act, EPA sets and reviews national air quality standards for particulate matter (PM). PM10 describes inhalable particles with diameters that are generally 10 micrometers or smaller. Air quality monitors measure concentrations of PM throughout the country. Air quality is an issue in the Yuma District.

With the Yuma NRCD assistance over the last 10 years, the agriculture community assists in air quality improvement because citrus trees and row crops retain soil. In addition, farmers wet roads for food safety, which decreases PM10.

Yuma NRCD also coordinates with the city of Yuma in its effort to plant 100,000 trees and eliminate invasive species.

Project summary and results:

We hosted a workshop with Natural Resource Conservation Service, AZ Game and Fish, Bureau of Land Management, and Arizona Association of Conservation District to provide land management practice information. We assisted Arizona Department of Environmental Quality and EPA to establish the fact that there are ha-boobs and strong wind storms in the desert. These winds are naturally occurring, impacting PM10 levels, and therefore all types of land management is important to decrease the PM10 levels.

Key Partners:

Laguna NRCD, Yuma Farm Bureau, Arizona Department of Environmental Quality, University of Arizona, City of Yuma, and County of Yuma



Local landowners
picking citrus



Local lettuce row crop



Haboob, left center of
photo, in the Yuma area

Other Accomplishments

- Yuma Conservation Garden provides environmental education to encourage responsible stewardship of our natural resources using donation and state funds.
- YUMA CONSERVATION GARDEN, INC. provided school tours to 10 schools and hosted 6000+ visitors at the botanical garden.



Val Morrill with a plant class at Yuma Conservation Garden

MORE WORK TO DO

- Partner with Arizona Game and Fish Department and Yuma Habitat Council to investigate funding sources, to install wildlife drinkers in the local Wilderness, and to identify areas for future habitat development. Our board volunteers to maintain drinkers.

