

WINKELMAN NATURAL RESOURCE CONSERVATION DISTRICT

Summer, 2017

PO Box 486, Kearny, AZ 85137 WNRCD.org

From the Frog Pond by Bill Dunn

Looks like the Winkelman District overall has had a pretty good summer. Hope everyone got some of it.

Along with this newsletter will be a request for annual donations. Hope you think it worthy to contribute. It should have come out at the first of the year but I forgot. Chris Postel, our district clerk has been asking me about it for some time but I kept forgetting. Let me list a few things the district has done lately so you can make an informed investment.

One of our big projects that should be coming to an end this year is the SunZia Transmission Line Project. If you recall, Winkelman and Redington demanded coordination with BLM over the Environmental Impact Statement (EIS) several years ago. We brought in American Stewards of Liberty too help us with this since it was such a big undertaking. The SunZia Project was fast-tracked by the previous administration because it was to be carry renewable energy. We also hired an attorney, Lat Celmins to help guide us in the event of a lawsuit. Before it was all over, we had hired an environmental consulting firm also, thanks to some generous donations during this time. Our goal was to get them to keep the line out of the San Pedro Valley and stay along I-10 where the environment was already compromised from other developments.

Even though the Final EIS came out with the route going along the San Pedro, we feel like we were instrumental in getting it routed up out of the river bottom. After the EIS decision, the Arizona Corporation Commission's Line Siting Committee had to give the route their approval. Through several days of hearings and site visits by the Committee, we kept our attorney and our clerk at those hearings taking

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notes and giving testimony. Toward the end of the hearings, we made a deal with the SunZia folks to stop fighting them. In return, they agreed to pay us back all our expenses and we would have a say in their Plan of Development and Construction through the two districts. They are finishing the Plan of Development now. We hired Chris Fletcher to be our landowner liaison and he is doing a wonderful job of getting the affected landowners to meet with the SunZia reps and address their concerns. Also of importance, the construction for major portions of the line along the San Pedro is supposed to be done using aerial construction; so, they have minimal impact on the watershed and little or no road construction. SunZia will also be giving the districts monies for the next three years to further our conservation mandate.

In the end, I think we furthered Coordination and had a hand in getting some new people in the BLM state office. Hopefully, we can make the line as in obtrusive as possible for our cooperators

The next project is the Kearny River Fire. We have been notified that we will receive funding to help clear a defensible space for the Town of Kearny. The environmental studies should be finishing up soon and we can start work. We had to scale down the funding request from its original plan to include making properties up and down the river Fire Wise because those private landowners would have to let the

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Frog Pond (Continued from Page 1)

government do environmental & cultural studies on their land. I don't blame them. We should start work on the Kearny lands this fall.

Next, came the Dudleyville fire this summer. We will be applying for a State Forestry grant this winter to help those folks. Since it won't be using federal funds, the environmental and cultural studies won't be needed.

Lastly, we are joining with Redington do two things: hire a coordinator to help our cooperators get some conservation projects on the ground, find funding opportunities, work with NRCS on some planning, and build and help fund a Native Plant Nursery at Aravaipa Campus. This will be used to grow locally adapted plants for some of the fire rehabilitation and as a teaching tool for CAC.

In terms of environment education for our children last year, the Ray Primary school started using the Ag in the Classroom curriculum and materials from the Arizona Farm Bureau. We even constructed 2 classroom gardens, see picture below. Also, we sponsored 4 field trips for the Ray Primary students, see picture below. Earlier in the month, we attended the Hayden and Ray school's first day orientation session to promote Ag in the Classroom and field trips. We sponsored 10 scholarships for CAC's College for Kids program. Over, 65 students participated in this year's program for 2 weeks.



Classroom Gardens



Ray 1st Grade trip to Besh Ba Gowah

I probably have forgotten something but you can see your district has been pretty busy. If you think it worthy, please send your check to the Winkelman Resource Management Center, a 501C3 operated by the district. PO Box 68, Mammoth, AZ 85618

Until next time.

Central Arizona College Agriculture Professor Karen Geldmacher requires her students to write papers on natural resource concepts including wind, water, wildlife, forestry, soils & the historic open range cattle industry. Jacob is an Ag major from Coolidge, Arizona. He will earn his Associate of Agriculture degree in May and transfer to the University of Arizona College of Agriculture in August.

The History of Windmills
by Jacob Simpson
Central Arizona College

When the wind blows, it is commonly considered a nuisance; however, it can be one of the most beneficial natural resources we have when used correctly. Once the windmill was invented, its uses were limitless. The windmill began as a device used for milling grains and then moved on to being used as a water pump and is still used to this day to generate electricity. I believe that it is safe to say that without the creation of the windmill, the world would not be what it is today.

The first recorded use of the windmill was to mill grains. The original windmill was developed in Persia about 500-900 A.D. (Illustrated History). The grain mill was a pretty simple design that included a large stone built onto the same shaft as the windmill blades and as the wind turned the blades, it turned the stone and crushed the grain against another stone. This accelerated the milling process tremendously and allowed for the production of more and more food products made with grain to feed a growing population at the time. As the demand for food increased naturally the demand for clean water did as well.

Shortly after the mill was invented for grinding grain, its primary use became pumping water. The most recognized windmill design in America was created in the 1800's. It was created by a machinist in Connecticut by the name of Daniel Halladay to solve the problem of the lack of clean water for livestock (Water Pumping Windmills). It revolutionized the way that windmills operated. They were the first windmills that actually changed direction with the wind and was able to provide a consistent water supply to the dry areas of the western United States. With time, designs of the windmill changed to include a stronger structure made of steel and other qualities to adapt to the demands of the farmers and ranchers. After such advances, greater uses of the windmill were soon discovered.

Nowadays electrical power production is one of the most common uses of the windmill. Wind turbines use the same concept of previous windmills of harnessing the energy of wind and converting it to other forms of energy. The difference with wind turbines is that they are able to generate energy that can be stored and used at a later time. Unlike a windmill for pumping water that can only be used to perform one task, the energy generated by a wind turbine can be used to carry out an endless amount of tasks. According to the American Wind Energy Association, over 49,000 utility-scale wind turbines in the United States generate about 4 percent of the United States' power (AWEA, 2015). This version of windmills is by far the most efficient at converting wind to usable energy but like with any windmill, the opportunities are endless.

Windmills are largely responsible for creating the world that we live in today. The invention went from milling grain and pumping water to creating electricity. Ever since the windmill was invented, it has constantly changed and been modified to suit many different applications that are still in use today. I do not doubt that there will be even more changes to the windmill in the future but one thing is for sure, the ability to harness the energy of the wind is something that will always be an asset to our society.

References

American Wind Energy Association (AWEA). Wind Energy Facts at a Glance. 2015.

<http://www.awea.org/wind-energy-facts-at-a-glance>

Illustrated History of Wind Power Development. <http://telosnet.com/wind/early.html>

Water Pumping Windmill History In America. <http://www.ironmanwindmill.com/windmill-history.htm>

**Arizona Department of Agriculture (AZDA)
by Sharma Torrens (Legislative Research Policy Administrator)**

Sharma is familiar with the Winkelman NRCD (and other NRCDs) through her work with the Arizona Land and Water Trust, a nonprofit that works to conserve agriculture. Now, she works with the AZDA, where she monitors legislation, works with legislators, write grants and educates Arizonans about the importance of agriculture to society.

Formed in 1991, the Arizona Department of Agriculture (AZDA) was created to replace several boards and commissions such as the Office of Pest Management. The AZDA's mission is to support and promote agriculture in a way that encourages farming, ranching and agribusiness, protects the well-being of people, plants, animals and the environment while safeguarding commerce, consumers and natural resources.

The governing statute is A.R.S. Title 3. AZDA is comprised of 8 different divisions with approximately 250 employees. An overview of AZDA's eight divisions with their key tasks-responsibilities is listed below.

- 1) Agricultural Consultation and Training (ACT) is the non-regulatory division that encourages voluntary compliance with regulation. ACT engages in the following:
 - Trainings;
 - Grants (e.g. Specialty Crop Block Grant Program, Livestock Conservation Crop Grant Program (which lacks current funding));
 - Education (e.g. pesticides, air quality, GHP/GAP);
 - Supports Councils/Boards.
- 2) Animal Services Division (ASD) is the regulatory division that protects the public and improves the health, quality and marketability of Arizona animals and animal products. ASD does the following:
 - Identifies and prevents zoonotic diseases (i.e. diseases that can jump from animals to people);
 - Enforces the laws of sale, importation, transport and processing of livestock;
 - Safety inspections for meat, milk, and eggs;
 - Office of Special Investigations (Livestock Cruelty + Native Plant Act violations).
- 3) Citrus, Fruit & Vegetable Standardization (CFV) helps industry and the public by providing produce licensing, collection of statistical data and fresh produce administrative assistance. CFV does the following:
 - Collects commodity reporting;
 - Developed the Leafy Green Marketing Agreement (LGMA) (i.e. uniform safety guidelines, means for traceability and conducts audits(LGMAmembers consist of 97% of leafy green products grown in AZ));
 - Initiated the Produce Safety Rule (under the Food Safety Management Act of 2011).
- 4) Environmental Services Division (ESD) safeguards agriculture, public health, workers and the environment. ESD does the following:
 - Ensures compliance with pesticide use laws in agriculture;
 - Trains and certifies pesticide applicators and advisors;
 - Takes samples of feeds, fertilizers and pesticides for product quality.
- 5) Plant Services Division (PSD) facilitates commerce and safeguards agriculture. PSD does the following:
 - Establish and enforces external quarantines (for hazardous pests);

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- Early detection of pest to minimize the impact;
 - Inspects and certifies agricultural and horticultural commodities for export.
- 6) State Agricultural Laboratory (SAL) provides the forensic agricultural laboratory testing, and certifies and trains regulatory divisions. SAL does the following:
- Tests feed, fertilizer, seed and pesticides;
 - Tests for pesticide misuse investigations;
 - Tests for mycotoxins in pet food and animal feed;
 - Tests milk, dairy, meat and produce for safety.
- 7) Weights and Measures Division (WMD) protects consumers and businesses by keeping commerce on a level playing field. WMD does the following:
- Ensures all commercial scales are accurate;
 - Responds to consumer complaints;
 - Inspects businesses licensed in AZ;
 - Ensures that prices are posted and items are scanned correctly;
 - Regulates AZ Cleaner Burning Gasoline and regulates vapor environmental programs;
 - Checks for gas skimmers (which steal credit card information from gas pumps).

Not only does the AZDA promote and support agriculture, but these eight divisions impact every citizen in Arizona. In addition to all that the AZDA does thru its divisions, the AZDA also engages in many other activities as well.

For instance, the AZDA put forth the Management Plan for the Protection of Pollinators and has convened a Bee Advisory Committee (BAC). The BAC's purpose is to be a forum for discussing issues relating to bees and pesticides and to help improve bee health by finding practical solutions that help all of agriculture.

Also, the AZDA has partnered with the Agribusiness & Water Council to put on the Agribusiness Round Table events. In its third year, this event will be held at the PERA club on December 4, 2017. The focus is to inform agriculture and agribusinesses about various topics. With an expected attendance of 200-300 persons, as it was in prior years, the focus will be on a national perspective on agriculture and the Farm Bill. Further, the AZDA is a member of the Conservation Partnership, working to see how it can aid in restoration and conservation efforts. Overall, the AZDA is a partner and will continue to look out for agriculture, agribusiness, consumers, the environment, the public, industry and for the NRCDs.

NRCS Warning

SAM (System for Award Management) numbers are required by entities for NRCS Programs. Receiving a number and renewing a number has no fee associated. The website is Sam.gov. If you received a notice to renew, you may also be receiving solicitations from other private companies charging a fee. No fee is needed. These private companies often say they will expedite the number. There is no need for this. Your number will expire annually and can be renewed simply by going to Sam.gov and clicking through the renewal screens. If you allow it to expire, it will take longer. Should you need further assistance, please contact your local NRCS office as we have an employee who is well versed in this topic.

Kristen Egen, District Conservationist,
NRCS Tucson Field Office, [520-292-2999](tel:520-292-2999) ext 105, Cell [520-471-1845](tel:520-471-1845)



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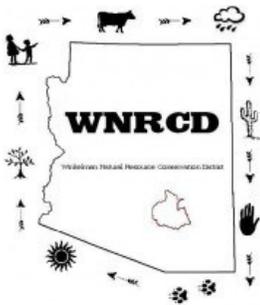
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Ray Federal Credit Union is proud to serve the communities of the copper basin with a full range of financial services. We strive to provide courteous and professional service. **Dan Thurman** is the new manager of the credit union and welcomes your comments and suggestions.

Mark Your Calendar

Range & Livestock Workshop on Sept. 22 at 8:30 am, Miami, AZ, contact Ashley Hall, 928-402-4391

WNRCD Quarterly meeting on November 15 at 10 am, location to be determined.



PO Box 68
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