

2019 ANNUAL REPORT

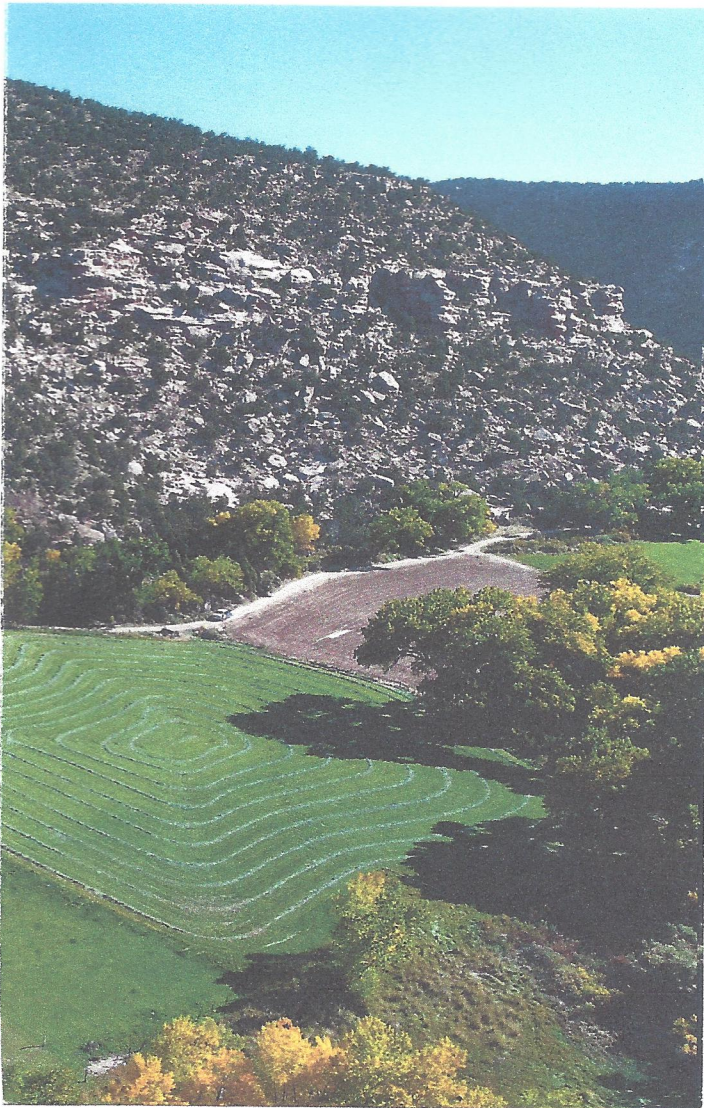
HIGH DESERT CONSERVATION DISTRICT



HIGH DESERT CONSERVATION DISTRICT

*Planting seeds of inspiration to promote
conscious stewardship of our natural resources.*

Serving Montezuma County for 75 Years



CONTACT US

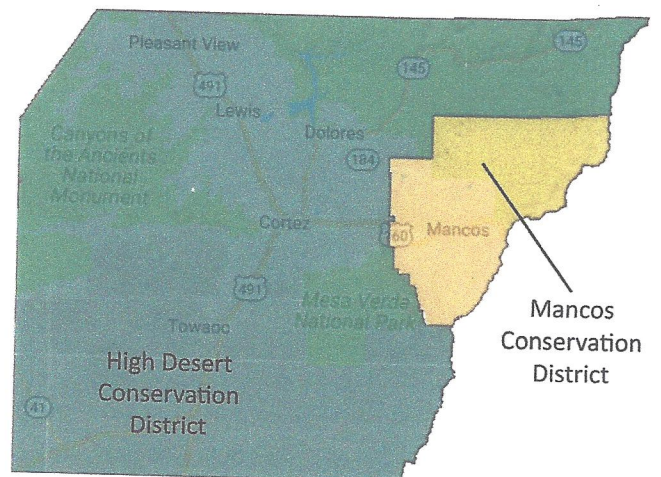
High Desert Conservation District

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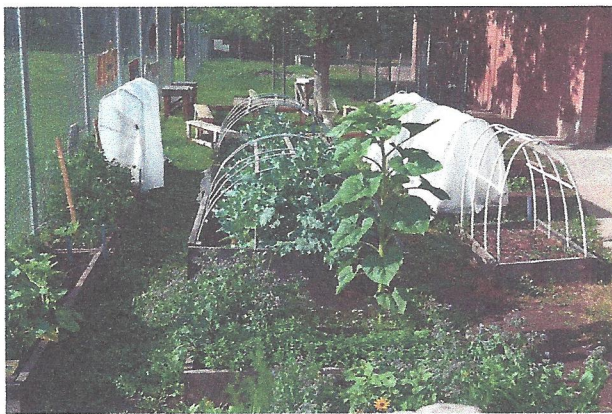




MONTEZUMA SCHOOL TO FARM PROJECT
Operating in Both Districts



Montezuma School to Farm Project (MSFTP), a program of the Mancos Conservation District, with financial support from HDCD, is dedicated to providing integrated, hands-on, school garden classes across Montezuma County. Programming began in 2009 with a farm field trip for 40 Mancos students. In the eight years since those barn doors first opened to local kids, the program has grown to incorporate six school garden programs, a 7-acre production space, heritage orchards, and a cutting-edge curriculum for more than 2,300 students on a monthly basis.



www.montezumaschooltofarm.org



HIGH DESERT CONSERVATION DISTRICT

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Master Land Steward Program

This intensive 9-week course highlights water, soil, production & all facets of effective land management for both beginning and long-time area farmers & ranchers.

Water Efficiency Programs

HDCD offers Irrigation Water Management workshops and on-farm assessments to maximize production.

No-Till Seed Drill Rental

This drill is often used to rejuvenate tired pastures or to plant crops without having to disc or plow and to plant competition for weeds after a control method has been applied.

Partnering to Create a Demonstration Farm

Working together with Montezuma Land Conservancy, HDCD is creating a demonstration farm to provide comprehensive conservation educational opportunities for all ages.

Conservation Supplies - Sales

HDCD sells seedling trees for conservation purposes, weed barrier, and drip irrigation kits.

www.highdesertconservation.org



**For More Info:
Call 970.529.8368**

DISTRICT CONSERVATION TECHNICIAN PROGRAM

*OPERATING IN BOTH CONSERVATION DISTRICTS
Offering Agricultural Consultations*

The District Conservation Technician (DCT) Program was started to create a federal, state, and local partnership to deliver technical assistance to private landowners. This program is administered through local conservation district offices with assistance from the Natural Resource Conservation Service. Here in Montezuma County, both of our Conservation Districts have DCTs to assist landowners with projects.

DCTs are available to help with one-on-one site visits, technical design, and consultations.





Master Land Steward

Learning to Care for Our Land

High Desert
Conservation District

*Join Us Weekly for a 9-week Intensive
Workshop Focused on YOUR Land*

*Thursdays - Jan 17 - Mar 14, 2019
6pm - 8:30pm*

Explore the Best Use of Your Property

- Incorporate your property goals into a long range plan
- Prioritize what to do first
- Learn about the soils you have on your land and how to improve them
- Irrigate for better crop production and water conservation
- Prevent noxious weed infestations
- ...and much more!



**COLORADO STATE
UNIVERSITY**

*For More Info:
Call 970.529.8368*

High Desert
Conservation District



High Desert
Conservation District

Master Land Steward

Course Outline

Jan 17 - Mar 14, 2019
Thursdays - 6pm - 8:30pm

*Join High Desert Conservation District and Resource Experts
for a 9-Week Intensive Workshop Focused on YOUR Land.*

- Week 1: Setting the Stage: Inventory of Resources
- Week 2: Soil Health Improvements, Water Holding Capacity, and Soil Fertility. Soil Types & Tests
- Week 3: Water in Colorado: San Juan Watershed, Dolores Project, Irrigation Water. How Does it Impact Our Land?
- Week 4: Focusing on Your Goals: Develop a Game Plan
- Week 5: Growing & Managing Grasses for Forage & Hay Production
- Week 6: Controlling Weeds & Infestations. Pasture Establishment and Renovation
- Week 7: Benefits and Management of Woody Vegetation. Forest Management, Firewise Defensible Space
- Week 8: Dealing with Wildlife and Game.
- Week 9: Stewardship for Sustainability. Course Review.

*By the end of the course, you'll have a Customized
Management Plan for your property that meets your needs!*

Course Fee: \$130 per Property

Online Registration:

www.HighDesertConservation.org



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**For More Info:
Call 970.529.8368**



Drones in Agriculture Pilot Project

Southwest Basin Roundtable

Narrative:

The High Desert Conservation District (HDCD) is submitting this concept proposal in a collaborative effort with neighboring Conservation Districts (Mancos and Dolores). This is a proposal to research the use of drones or unmanned aerial vehicles (UAVs) as a tool for helping agricultural producers conserve soil, water and time as well as assist the Conservation Districts and Natural Resource Conservation Service (NRCS) in observing, inspecting, and documenting field operations.

Many new state and federal conservation programs were borne as a result of the Dust Bowl crises. Conservation Districts were created nationwide to facilitate the effective delivery of soil and water conservation practices. In 1941, authorization was given by the Colorado Department of Agriculture (CDA) to form what is now the High Desert Conservation District. The initial purpose was to act as a liaison between government agencies and landowners to help bring programs and practices to the agricultural producers. Today, over 75 years later, HDCD remains a pro-active, grassroots organization that promotes healthy, sustainable agriculture and locally led conservation here in Montezuma County.

This 'Drones in Agriculture' pilot program will study the potential uses and effectiveness of using drones as a tool for producers to monitor and address such issues as irrigation water management in the form of pivot/side-roll performance and efficiency, soil erosion and runoff, plant stress due to irrigation issues, pests and disease, and crop damage from wildlife, among the myriad of possibilities. The high-resolution videos and pictures tell a comprehensive story, in real-time, that can be a valuable tool for producers to make timely decisions, repairs and adjustments to increase efficiencies and yields. Time is a limited resource for most producers and this technology has the potential to conserve this valuable commodity. This technology can provide empirical, tangible and accurate information for producers. So much of our work involves theoretical discussions about microscopic events such as soil health, plant water use and chemistry. Producers typically have to believe the Conservationist's words and descriptions of the science. These visual images have the potential to make those conversations much more understandable and credible. We have already used a drone to assess center-pivot nozzle performance relative to yield, inspect another pivot for leaks/clogged nozzles and to photograph elk damage in a corn field. The producers we worked with were very pleased with the images and information we obtained on these flights.

The other component to be analyzed is how the use of this high-tech tool can help the Conservation Districts and NRCS do their jobs more efficiently. Our respective missions commonly include work on very large areas, ranging from CRP ground to forest health, grazing land and so on. Inspection of these areas and documentation of in-situ treatments, practices and results are a critical part of our work. Again, these high-resolution videos and pictures can be worth a thousand words of technical notes for these personnel. One of our initial goals would be to identify areas of work that can be streamlined through this technology.

The first year of this project will include the analysis of current equipment, software videography and technologies. It will also analyze which technologies can actually be of use to area producers. Much of the drone work involves thermal imaging to provide results such as nutrient deficiencies in fields. While that is helpful information, often-times producers would need variable rate application equipment using GPS to respond to the data. Many producers in this area simply do not have these tools at their disposal so understanding not only what the drone data can do for us but also what we can do with the information will be an important component.

We plan to retain an area drone professional who operates a commercial business for consultation. We will purchase an inexpensive drone for our work. We will also have access to another drone for back-up in the event of a wreck. Conceptually, we propose to evaluate 5 properties of various size, shape, slope, crop and irrigation system, flying a regular schedule/pattern to compile images that will be compared over the course of the season. The details of each field data collection/analysis will be designed prior to the start of the season. We will also provide some individual flights for visual analysis of fields for area producers. Minimizing the costs associated with this project in the first year will allow us to better understand just what technology we need so that we do not over-spend on unnecessary bells and whistles if we decide to purchase additional technology for future use. We also propose to obtain training and commercial certification for the HDCD-DCT (Greg Vlaming) in accordance with Federal Law for commercial drone operators.

Preliminary Budget Estimate

\$5000-Commercial Drone Consultant

\$5000-Drone/software purchase, possible rental, operator time

\$10,000-HDCD-DCT professional development, time

\$20,000

Videos and pictures obtained through the drone flights we have done this year were presented at the meeting October 10, 2018.

Greg Vlaming

High Desert Conservation District-DCT

Save the Dates!

Learn skills that will help you schedule and manage your irrigation practices for improved soil health, water conservation, and maximizing crop yield.

Be prepared to be outside.



Irrigation Water Management Workshops

R.S.V.P.

June 7 - High Desert CD

970-529-8368

June 8 - Mancos CD

970-533-7317

LOCATION: Cortez LOCATION: Mancos

DATE: June 7th, 2018

DATE: June 8th, 2018

TIME: 10:00AM

TIME: 10:00AM

This session is recommended for producers with cost shared IWM contracts and those who wish to improve their irrigation management practices.

Please RSVP!

**Find out
What's New With
Colorado Ag Policy**



Meet **Kate Greenberg**, newly appointed
Colorado Agriculture Commissioner!

&

NRCS workgroup meeting to assess what
our landowners want and need.

Continental Breakfast Provided

RSVP andrew@highdesertconservation.org

Friday, July 12th 9:30-11:30 AM

Lewis Arriola Community Center

21203 Rd S, Cortez, CO 81321



We Need **YOUR** Help to Plan
for NRCS Program Funding!!



SOUTHWESTERN COLORADO
RESEARCH CENTER
COLORADO STATE UNIVERSITY

Please join us!

Southwestern Colorado Research Center

16898 Road Z, Yellow Jacket CO

Field Day and Expo

Wednesday August 14

9 am - 1 pm

Lunch Provided

Field tour to include:

Research trials (Dry Bean, Industrial Hemp, Spring Wheat, Grain Sorghum, Alfalfa, Cover Crops)

Drone demonstration by: High Desert Conservation District/Raptor Imaging

Ask the Experts! (Bring in a plant, weed, insect, etc. to identify or discuss)

Tour the orchard and learn about the project

And MORE!

Please make sure to prepare to be outdoors for several hours in the heat. Transportation on-site will be provided.

RSVP is appreciated for lunch estimate. Call us at: 970-562-4255

Special thanks to our participants!:



COLORADO STATE UNIVERSITY
EXTENSION

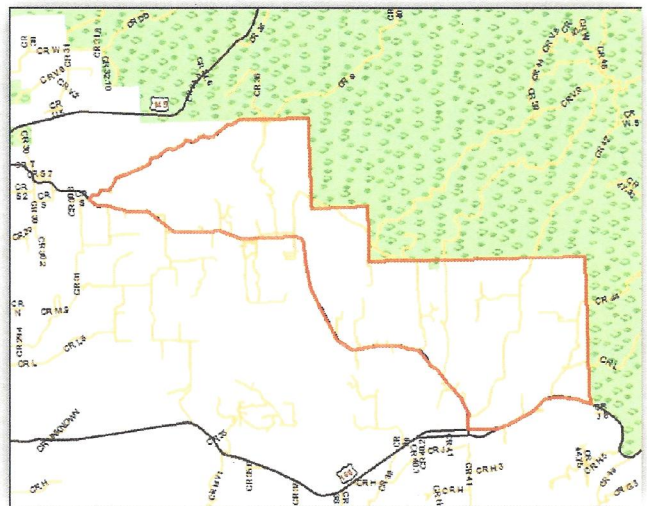


HIGH DESERT & MANCOS CONSERVATION DISTRICTS LANDOWNERS

High Desert and Mancos Conservation Districts are partnering with the Natural Resources Conservation Service (NRCS) to obtain federal grant funds for landowners to create healthy forests on their land with a focus on conservation. This is a very limited time opportunity to receive forest thinning funds. All work should be completed in 2019 and with NRCS funds to be reimbursed to the landowner following project completion. This NRCS grant focuses on creating and carrying out a plan for resilient and sustainable forested land in an effort to: reduce wildfire impacts by clearing out excess fuel; reduce pest/beetle infestations; and enhance habitats for wildlife. The focus for this grant funding includes landowners with land located along the border of the forest service in Montezuma County.

An informal meeting will be held next **Thursday, August 16th, from 6-7pm** at Mancos Conservation District (604 Bauer Avenue, Mancos). The grant project and process will be explained in more detail, and representatives from High Desert and Mancos Conservation Districts and Fire-Wise of Southwest Colorado will be on hand to answer any questions.

Landowners within the targeted landscape should attend the informational meeting if possible and can also fill out the online [Interest Form](#) before **August 19th**.

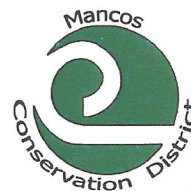


The targeted landscape for private forest projects is in the transition from piñon-juniper woodlands to ponderosa pine dominant forest up to the U.S. Forest Service border including the area east of Hwy 184 and north of Hwy 160 between County Road S (Haycamp Road) and County Road 44 (Echo Basin Road).

Questions?

In High Desert Conservation District: Victoria Petersen
Lewis - 970.529.8368

In Mancos Conservation District: Gretchen Rank -
970.533.7317



Friday, Nov. 15th /
9:00-11:30 AM

Lewis-Arriola
Community Center

21203 Rd. S, Cortez, Colorado 81321

Water Saving Practices and WindBreaks

Sponsored by: HIGH DESERT CONSERVATION DISTRICT
RSVP: 970-529-8368

Continental Breakfast Provided

Annual Meeting Presentation



Greg Vlaming – Agronomist at Large

“Water Saving Practice for FSA Irrigators
through HDGD-DWCD Collaboration”

David Temple – Master Arborist

“Tree Windbreaks – Still a Great
Conservation Practice”



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HighDesertCD.org

Planting Seeds of Inspiration to Promote Conscious Stewardship of our Natural Resources

LOOKING AHEAD TO 2020!!

High Desert Conservation District is already in the planning stages of addressing major climate change concerns and finding the solutions that our local farmers and ranchers are seeking. Following a “think tank” of concerned landowners, the District will work with our collaborating partners to prepare agreed upon proposals and seek grant funding opportunities to help fund the work involved with the necessary research, consultations and field trials to accomplish sustainability, as well as, increased production and environmentally sound practices.

Subject: Carbon Farm Planning 'Think Tank'

Date: Nov 19, 2019 8:22 AM

Friends of the natural world,

As the High Desert Conservation District transitions into a new era, I would like to begin a local conversation about a Carbon Farm Planning Initiative. My goal is to gather a local contingent (“a loose association”) of folks who may have interest in this topic and discuss the relevance of how agricultural practices play a prominent role in extreme weather patterns when soil health is not recognized as a top priority in land management decision-making. Furthermore, how can the platform of the HDCD help change this trend through helping agriculturalists, land owners/stewards, and others make decisions that build ecosystem resilience and help mitigate weather related extremes through planning and implementing Carbon Farming Practices. I would also like to present and discuss how the NRCS COMET Carbon Farm Planning model can assist us in these efforts.

I am inviting you all to this “Think Tank” so we can discuss how a local/regional program might work.

Thank you for responding to the Doodle Poll link below indicating your availability.

Greg

[Carbon Farm Meeting Link](#)

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Greg Vlaming
Agronomist at Large
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970.769.3271 (cell)
Greg@highdesertconservation.org