



## Natural Resources Conservation Service helping people help the land

Pictured from left to right:  
NRCS District Conservationist Jaime  
Jasmine, Bill Beck and Tribal  
Chairman Ted Howard stand at a  
newly installed portion of an  
irrigation system at the Duck Valley  
Indian Reservation.  
See story on page 4.

## 2020 NRCS Nevada Annual Report

**THE USDA NATURAL RESOURCES CONSERVATION SERVICE (NRCS) PROVIDES INNOVATIVE CONSERVATION SOLUTIONS TO RESTORE, ENHANCE AND PROTECT NEVADA'S WORKING AGRICULTURAL LANDS.** Our voluntary Farm Bill programs provide technical and financial assistance to help farmers and ranchers address natural resource concerns such as water quality, soil erosion, wildlife habitat, and much more. NRCS leverages partnerships across Nevada to invest in landscape-scale conservation. This report captures NRCS Nevada's investments and successes throughout fiscal year 2020, which extends from Oct. 1, 2019 to Sept. 30, 2020.

### Watershed Programs in Nevada

Under the Watershed Program, NRCS carries out works of improvement for soil conservation and for other purposes including flood prevention; conservation, development, utilization and disposal of water; and conservation and proper utilization of land. The Emergency Watershed Protection (EWP) Program safeguards lives and property from floods, drought, and the products of erosion on any watershed whenever fire, flood or any other natural occurrence is causing or has caused a sudden impairment of the watershed. The Watershed and Flood Prevention Operations (WFPO) Program provides technical and financial assistance to entities of state and local governments and Tribes (project sponsors) for planning and installing watershed projects. The Watershed Rehabilitation Program offers financial and technical assistance to rehabilitate dams constructed through NRCS Watershed Programs. This program extends the service life of dams to meet applicable safety and performance standards or decommission the dams so they longer pose a threat to life and property.

## NRCS Nevada FY20 Investments on Private Working Agricultural Lands



### Environmental Quality Incentives Program

Contracts . . . . . 76  
Acres. . . . . 63,962  
Dollars . . . . . \$7.703 million



### Conservation Stewardship Program

Contracts . . . . . 22  
Acres. . . . . 6,003  
Dollars . . . . . \$428,767



### Regional Conservation Partnership Program

Contracts . . . . . 1  
Acres. . . . . 1,755  
Dollars . . . . . \$162,650

### Here are the current watershed projects in Nevada:

#### Dam Rehabilitation Program

West Wash Dam Sponsor: City of Reno Location: Reno, NV  
Description: Update structure to meet current NRCS and state standards to increase public safety downstream of the dam. Project funded for planning, design and construction phases.  
Funding: \$3,004,000

#### Watershed Flood Prevention and Operations Program

Walker River Watershed Project Sponsor: Walker River Irrigation District Location: Yerington, NV  
Description: Reduce and mitigate sediment deposition in key areas that has caused inconsistent delivery of irrigation water, an increase in flooding, increased operation and maintenance cost, poor water quality, declining riparian and upland habitats, and decreasing vegetative diversity. Project funded for Watershed Plan and Environmental Assessment completion.  
Funding: \$338,247

#### Truckee River Watershed Project

Sponsor: Washoe Co. Water Conservation District and Steamboat Irrigations Canal Company  
Location: Reno, NV  
Description: Increase ag water management, stormwater management, public recreation, fish & wildlife, and water quality while providing flood protection & public safety to local communities and residents. Project funded for Watershed Plan and Environmental Assessment completion.  
Funding: \$935,000  
*Continued on next page*



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## Snapshots of Success

## NRCS Nevada FY20 Investments on Private Working Agricultural Lands



The Newbys unroll and lay the livestock pipeline

### Stewards of the Land

"We can help sustain wildlife, and of course our main interest is the cattle – but it's more than that – it's fire suppression during the fire season, working with the county to build roads. It's a real multiple use situation with this water, and we're just grateful to be able to access it and grateful for the funding through NRCS," said Greg Newby. "We feel a great need to be the best stewards of the land that we can, and in order to do that, we needed the water to be where it would be most beneficial."

The Newbys are no longer managing an aging, broken pipeline system; they are managing livestock. And the metamorphosis is showing on the land.

"As we continue to learn how to become better stewards, it



includes learning more about the environment out here, learning about the plants. The more we understand as ranchers, the better ranchers we can be, and the better stewards we can be," said Greg Newby.

Photo above: District Conservationist Teri Knight talks with producer Greg Newby about rotational grazing and plant utilization. Photo below: Sunshine replaces diesel fuel; a solar pumping plant brings groundwater to the surface, saving the Newbys money and fuel. Instead of using diesel generators to pump water to the storage tanks and troughs, the solar panels do it for them.



Photos of the devastating 2005 Southern Nevada Complex fires

Watch the video of this story on the NRCS Nevada YouTube channel, called "Trifecta for Success: Newbys Success Story Video."



### Watershed projects, continued from page 1

**Quinn River Watershed Project**  
Sponsor: Ft. McDermitt Paiute and Shoshone Tribe  
Location: Ft. McDermitt Paiute and Shoshone Indian Reservation  
Description: Reduce flood damages and increase water supply availability for irrigation. Project funded for Watershed Plan and Environmental Assessment completion.  
Funding: \$825,000

**Emergency Watershed Protection Program**  
Douglas County EWP Project    Event: Numbers Fire    Sponsor: Douglas County  
Location: Minden, NV  
Description: Debris basin downstream of the burn area to capture increased flow and debris from burned area to protect life and property. Potentially construct stream gauge in the burn area for early warning.  
Funding: \$144,223

### NRCS Nevada Initiatives

#### Sage Grouse Initiative

Contracts . . . . . 2  
Acres . . . . . 1,638  
Dollars . . . . . \$445,400

#### High Tunnel Initiative (AMA)

Contracts . . . . . 18  
Acres . . . . . 3.9  
Dollars . . . . . \$157,768



to put in a stretch of brand new pipe, and we asked NRCS if they had help for these things, and they said they do," said Ken Newby, producer at Tule Ranch LLC.

### Making the Most of Every Drop

"When we look at the resource concerns for this allotment, one of them is inadequate water for the animals. Inadequate feed and forage are another. One of the ways we've helped resolve the inadequate water issue is by adding storage throughout the pipeline system," said Teri Knight, NRCS Nevada district conservationist. "Working together, we have installed more than 10 miles of new livestock pipeline; 209,200 gallons of water storage in nine repurposed storage tanks; and eight troughs that provide an additional 9,600 gallons of water for livestock and wildlife. Two wells now have solar panels as pumping plants, too."

Moving the water from the two spring sources up in the mountains down through the new pipeline, and then storing it at areas along the way in storage facilities and troughs is beneficial for both the animals and plants.



Above: repurposed storage tanks provide water on demand for the Newbys

acres secured at the historic Hunewill Ranch in Bridgeport Valley this year, working with the Eastern Sierra Land Trust, Hunewill family and others. Through the Agricultural Conservation Easement Program (ACEP)-Agricultural Land Easement Grasslands of Special Environmental Significance, the agreement marks the land trust's largest conservation easement to date, protecting habitat for Bi-State sage-grouse which raise their chicks in the ranch's wet meadows. Photo by Dwayne Leonard

### ACEP Easements

# 4,100



(From l to r) District Conservationist Teri Knight, Greg and his father Ken Newby, discuss the solar pumping plant installation plan with Cameron Boyce, assistant field manager for BLM Nevada.

### NRCS Works on Public Land? You Bet!

#### A Trifecta for Success: the Newbys, BLM and NRCS

NRCS works cooperatively with producers and its federal agency partners, including the Bureau of Land Management (BLM), to achieve collective goals of putting conservation measures on the ground. One great example is Tule Ranch LLC, a livestock enterprise that spans three generations, located about 120 miles northeast of Las Vegas. The Newby family ranches on five BLM grazing allotments on public land in Lincoln County, Nevada, totaling more than 183,000 acres.

They graze about 400 head of cows and calves, about half of what is permitted by BLM. The livestock numbers have been reduced due to wildfire, wild horse impacts and drought. The herd spends winter months on the Tule Desert in their southern allotments. Some animals are then moved to northern allotments in the warmer months by cattle drive, while some are moved to other private pastures in Utah and Nevada by semi-truck.

Since 2015, the Newbys have partnered with NRCS to receive technical assistance, as well as financial assistance through the Environmental Quality Incentives Program to install practices, including: Brush Management, Grazing Management, Livestock Pipeline, Water Facilities and Pumping Plants.

"Through the years we've had to re-do pipelines—we fix a little and then something else breaks. So, we wanted to have a project



### Investing in the Future with RCPP on Duck Valley Indian Reservation

From 2011-2015, the Duck Valley Indian Reservation between the border of southern Idaho and northern Nevada was in severe drought. The nearby Wildhorse Reservoir recharges through spring runoff and in those years did not recharge, yet it was still drawn down each year for irrigation. Without the reservoir, the tribe would be severely limited on the number of irrigated tracts. The drought was a factor in the decision to create a more efficient irrigation system on the reservation to improve production today and for future generations.

In 2014, the Duck Valley Shoshone-Paiute Tribes applied for a contract through the Regional Conservation Partnership Program, or RCPP. The major feature of RCPP is the substantial role of private partners working in cooperation with farmers and landowners. The program leverages federal conservation funds with private contributions to achieve large-scale natural resource conservation.

They were the first Native American tribes to be awarded an RCPP contract nationwide, and their partners included Duck Valley's Conservation District, tribal wildlife and parks, business council, and water board.

The first part of the project was to develop a livestock watering system to serve the livestock producers. The irrigation system was made up of a series of open canals and on farm ditches, where cattle would go to water.

In the effort to create a more efficient irrigation system, one of the challenges was to find a way to provide water sources for the cattle to keep them out of the canals and ditches. The tribes need to drain the irrigation system to maintain it during the winter, leaving no water for the cattle. Additionally, the cattle won't have water in the summer if the open ditches where they were drinking are changed to pipelines as part of the RCPP project.

To tackle these challenges, they installed 25 nose pumps first, to provide frost-free winter water. At certain locations on the reservation, the groundwater table is very shallow. Nose pumps were a new idea, and tribal members had to teach their livestock how to use them, with one producer's solution to brush molasses on the pumps—and it worked.

"It gets pretty tough in the wintertime over here. You need a four-wheel drive (vehicle) just to get in here, so this water is good to have here because it doesn't freeze," said producer Dolly Blossom-Paiva, pictured above with her grandson at one of their new nose pumps. "The water is real cold and seems to be a lot cleaner."

They are also installing solar livestock watering systems in areas where the water table is greater than 25 feet that includes water wells with solar pumps, troughs, and pipelines.

Rehabilitation of the irrigation system paralleled the livestock water development. Four irrigation pipelines were installed, replacing open ditch laterals with submerged orifice structures for water measurement. The submerged orifices allow ditch riders to determine the amount of water going through the pipeline at any given time. Now, there is nothing impeding water flow and no more need to clean out overgrown ditches.



"The goal of the RCPP project is to take the current 12,600 acres that's under production and increase that to over 21,000 acres," said Devin Heaps, water resources director. "Before this new pipeline, the water seepage out of the canal from old rusty, deteriorated pipes was producing a lot of willow growth."

The rust and deterioration were contributing to water loss and pressure reduction, interfering with the flow into the main canal. They have cut down the willows for better water flow and water conservation in the future. Several of the main diversion structures are now automated, allowing water delivery to be controlled from a computer, as seen in the above photo. Get the whole story by watching the video on the NRCS Nevada YouTube channel! YouTube

### Top 10 Most Installed Contracted Conservation Practices

1. Irrigation Water Management
2. Structure for Water Control
3. Herbaceous Weed Treatment
4. Irrigation Pipeline
5. Upland Wildlife Habitat Management
6. Brush Management
7. Fence
8. Sprinkler System
9. Pumping Plant
10. High Tunnel System

### Joint Chiefs' Landscape Restoration Partnership: South Sugarloaf Fire Rehabilitation – Humboldt-Toiyabe National Forest (Year 1 of 3)



**Contracts** . . . . . 2  
**Acres** . . . . . 15,659.5  
**Dollars** . . . . . \$171,111

The fire burned 145,000 acres of national forest system land, 80,000 acres of private land, and 10,000 acres of other federal or state land.

The fire adversely impacted the drainage basins to Wildhorse Reservoir, the Owyhee River, and the North Fork of the Humboldt River. These are all major water sources for members of the Shoshone-Paiute Tribes of Duck Valley and residents of Elko and Twin Falls counties.

USDA's Forest Service and NRCS will work together over three years on: improving upland and stream habitat; livestock distribution to protect wildlife habitat, water quality, and promote rangeland recovery; mitigating wildfire risk; protecting water supply for wildlife and permitted water users; and environmental education and public outreach. The Partnership allows NRCS and FS to collaborate with ag producers and forest landowners to invest in conservation and restoration at a big enough scale to make a difference.

### Irrigation Improvements at a Glance



**Practices** . . . . . 14 different types of irrigation practices  
**Contracts** . . . . . 87  
**Acres** . . . . . 51,860  
**Dollars** . . . . . \$7,382,217

### Nevada Quick Facts



#### Top 3

#### Commodities by Sales

1. Cattle/ Calves
2. Hay
3. Dairy Production

**3,350**

Farms in Nevada

**1,821 acres**

average farm size



**6.1 million**  
acres of farmland



**\$665.7 million**  
total ag production  
market value

\* Sources: 2017 Nevada Department of Agriculture Economic Analysis and 2019 USDA, National Agricultural Statistics Service (NASS) State Agriculture Overview