



**NEVADA  
COUNTY**  
CALIFORNIA

**Department of Agriculture,  
Weights & Measures**



**2021 Crop and Livestock Report**

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## MISSION STATEMENT

Nevada County's Department of Agriculture is dedicated to sustaining a healthy agricultural industry, while protecting the environment, the agricultural workforce and the community. The mission of the Nevada County Department of Weights & Measures is to provide fair compensation and equity in the marketplace and to ensure that the interest of the buyer and seller are protected through education, inspection and enforcement.

## STATISTICS

### Population<sup>1</sup>

101,919

### Highest Elevation

9,152 ft

### Urban and Built-up Land<sup>2</sup>

17,274 ac

### Density

101/sq mi

### Lowest Elevation

280 ft

### Total Harvested Cropland<sup>3</sup>

3,313 ac

### Total Area<sup>1</sup>

974 sq mi (623,360 ac)

### Farmlands<sup>2</sup>

7,760 ac

### Number of Farms<sup>3</sup>

365

### Land Area<sup>1</sup>

958 sq mi (613,120 ac)

### Grazing Land<sup>2</sup>

133,393 ac

<sup>1</sup> Source: California Department of Finance, E-1: City/County Population Estimates as of January 1, 2022

<sup>2</sup> Source: California Department of Conservation 2016-2018 Land Use Conversion

<sup>3</sup> Source: USDA National Agricultural Statistics Service 2017 Census of Agriculture, farms reporting sales greater than



## COUNTY OF NEVADA COMMUNITY DEVELOPMENT AGENCY

AGRICULTURAL COMMISSIONER/SEALER OF WEIGHTS & MEASURES

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CHRIS DE NIJS – AGRICULTURAL COMMISSIONER

**Karen Ross**, Secretary

California Department of Food and Agriculture,  
and

**The Honorable Board of Supervisors, County of Nevada**

Susan Hoek, Chair, Supervisor District 4

Ed Scofield, Vice-Chair Supervisor District 2

Heidi Hall, Supervisor District 1

Dan Miller, Supervisor District 3

Hardy Bullock, Supervisor District 5

In accordance with the provisions of Section 2279 of the California Food and Agriculture Code, I am pleased to submit the 2021 Annual Crop and Livestock Report for Nevada County. This report is a summary of counts, acreage, yields, and gross values of all agricultural production in Nevada County. It should be emphasized that the values in this report do not attempt to measure farm profitability, nor does this report attempt to place value on commodities grown for personal use.

The total gross value of all agricultural commodities produced in 2021 was \$21,222,300. This represents an increase of approximately 8%. With Timber removed, agriculture saw a 15% increase or nearly \$2.62 million more compared to its 2020 value. This increase is largely a result of more harvested acres and higher value for our vegetable crops.

With the COVID-19 pandemic still fresh in our minds we turn our attention to water and drought. With the fifth and second driest water years in a row (2020 & 2021), there is no doubt California is experiencing yet another crisis. It is said you only need 3 things to grow something: soil, weather, and water. While Nevada County may not have the best soils or the best weather, our talented farmers and ranchers continue to produce a wide variety of fruits, vegetables, and proteins. But without water, our farmers and ranchers would fail. **Water is the lifeblood of Agriculture.** This report also looks at water and the importance it plays in preserving our agricultural industry in Nevada County.

I would like to thank the many producers, industry representatives, businesses, and other public agencies who cooperated in supplying the data necessary to produce this report. Without their assistance, this crop report would not be possible. I would also like to thank the members of my staff for their contributions, with special recognition going to Agricultural Biologist Luci Wilson, for compiling the information and designing this report. Thank you!

Respectfully Submitted,

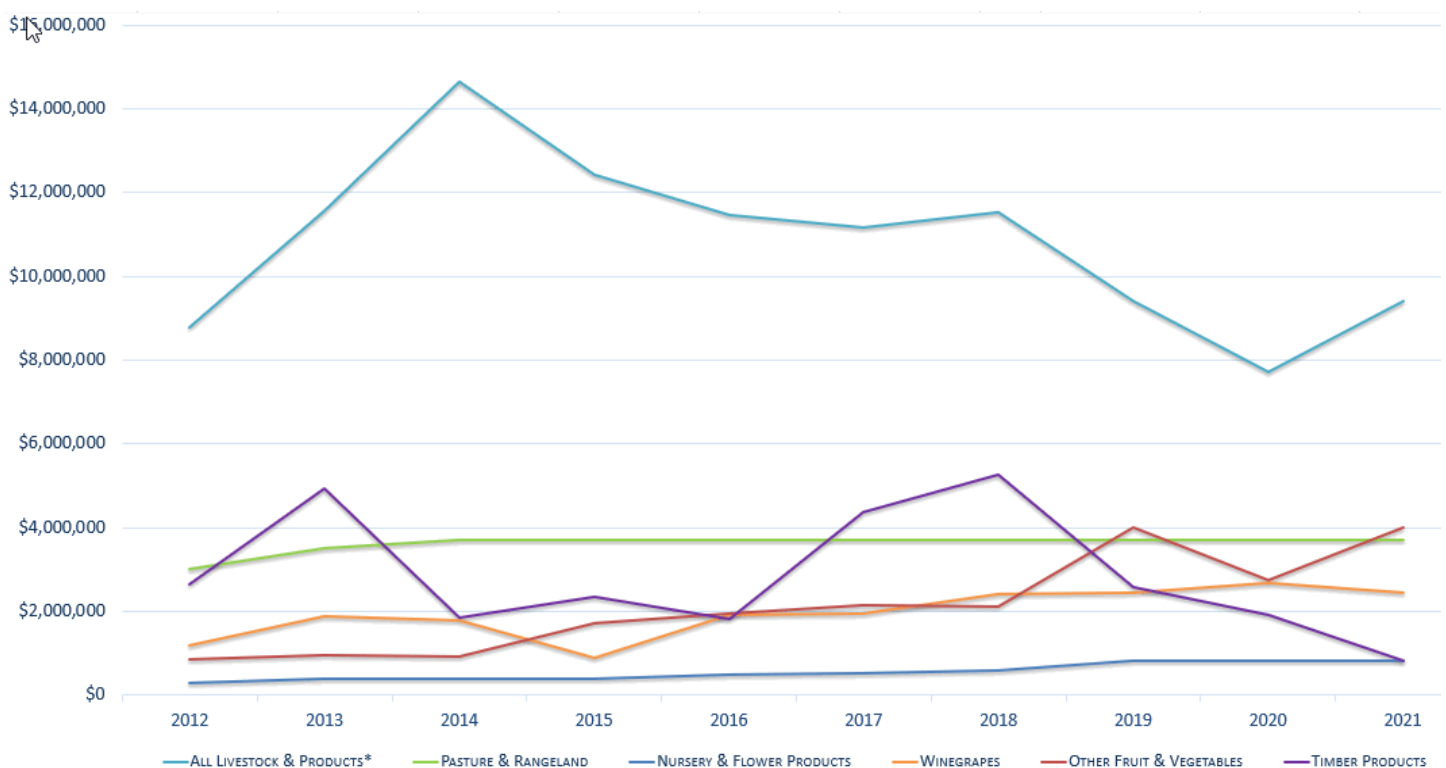
Chris de Nijs

Agricultural Commissioner and Sealer of Weights and Measures

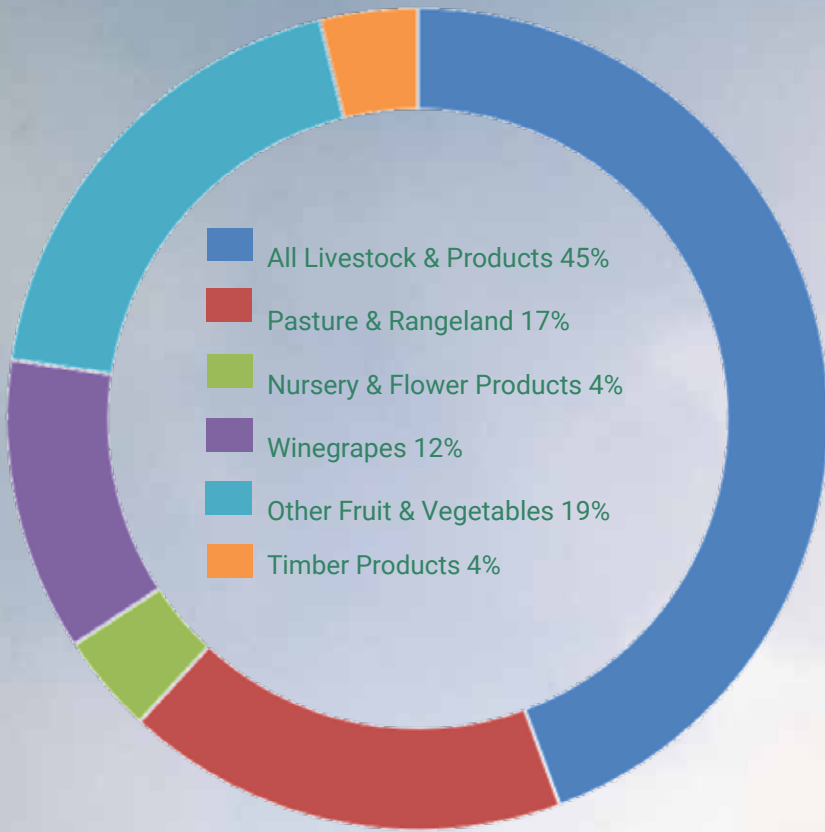
# 10 YEAR SUMMARY

Year	All Livestock & Products <sup>1</sup>	Pasture & Rangeland	Nursery & Flower	Winegrapes	Other Fruit & Vegetables	Timber Products	Total Value
2012	\$11,573,200	\$3,510,000	\$383,900	\$1,886,900	\$966,400	\$4,924,900	\$23,245,300
2013	\$11,573,200	\$3,510,000	\$383,900	\$1,886,900	\$966,400	\$4,924,900	\$23,245,300
2014	\$14,649,300	\$3,700,000	\$378,500	\$1,771,400	\$911,300	\$1,843,100	\$23,253,600
2015	\$12,417,100	\$3,700,000	\$392,500	\$888,900	\$1,725,700	\$2,344,600	\$21,468,800
2016	\$11,473,800	\$3,700,000	\$502,200	\$1,926,800	\$1,964,300	\$1,800,800	\$21,367,900
2017	\$11,167,100	\$3,700,000	\$531,400	\$1,957,400	\$2,150,300	\$4,356,300	\$23,862,500
2018	\$11,518,900	\$3,700,000	\$603,300	\$2,415,000	\$2,117,900	\$5,254,100	\$25,609,200
2019	\$11,367,300	\$3,700,000	\$631,700	\$2,550,400	\$2,579,900	\$2,565,000	\$23,394,300
2020	\$7,861,000	\$3,700,000	\$809,000	\$2,666,200	\$2,755,800	\$1,910,000	\$19,702,000
2021	\$9,446,800	\$3,700,000	\$810,200	\$2,449,100	\$4,002,400	\$813,800	\$21,222,300

<sup>1</sup> Includes all livestock, poultry, apiary, wool and egg products.

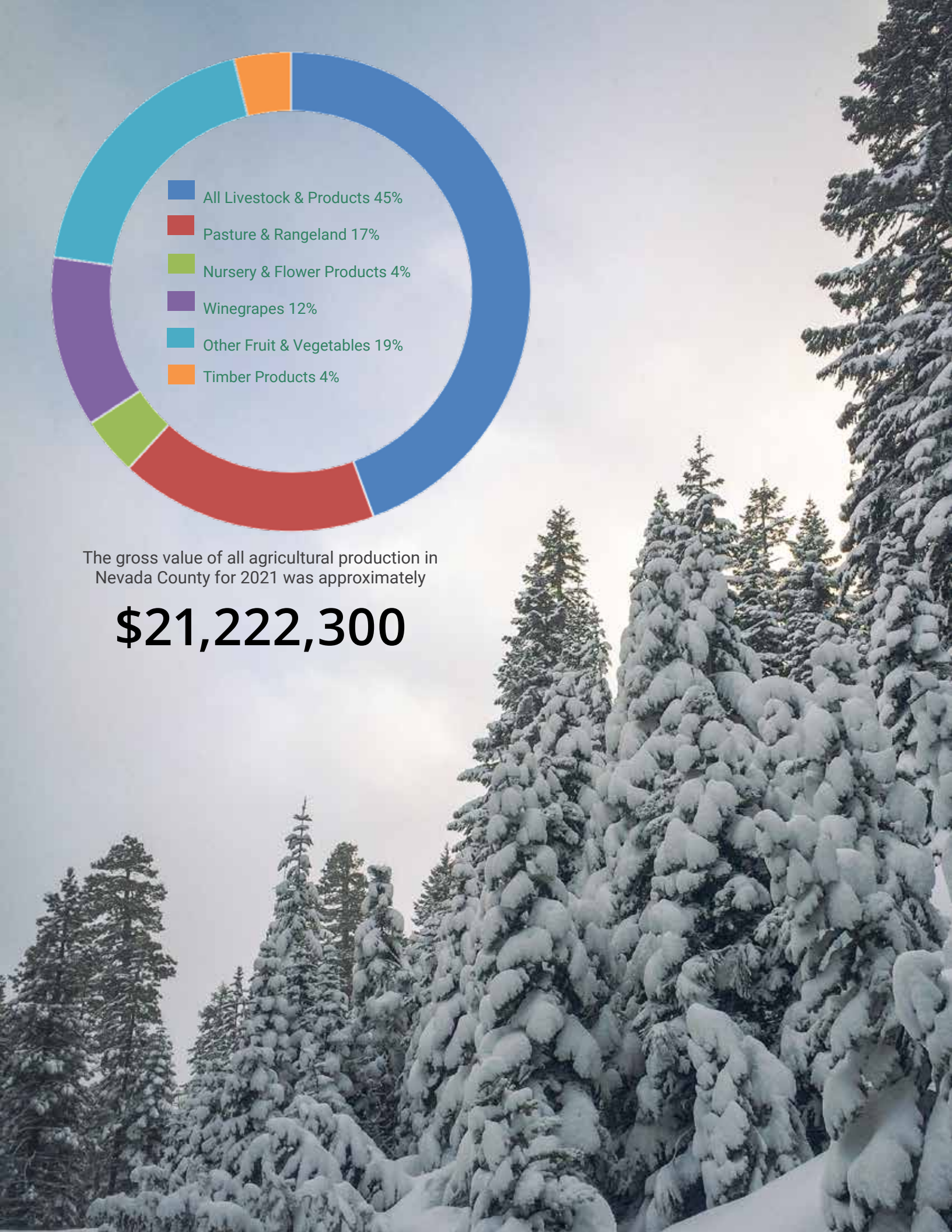










The gross value of all agricultural production in Nevada County for 2021 was approximately

**\$21,222,300**





## VEGETABLE, FRUIT & NUT CROPS

	Acres	Value
 	101	\$3,653,200
33% Vegetables <sup>A</sup>	95	\$2,448,600
 	41	\$349,200
14% Other Fruits	38	\$307,200
<b>Total Vegetable, Fruit &amp; Nut Crops Value:</b>		<b>\$4,002,400</b>
		<b>\$2,755,800</b>

## WINEGRAPE CROPS

	Acres	Total Tons	Value
 	315	1201	\$1,855,700
-9% Red Winegrapes <sup>C</sup>	314	1157	\$2,040,600
 	94	426	\$593,400
-5% White	94	413	\$625,600
<b>Total Winegrapes:</b>			<b>\$2,449,100</b>
			<b>\$2,666,200</b>



A Vegetables include bean, beet, broccoli, cabbage, carrot, cauliflower, celery, chard, corn, cucumber, eggplant, garlic, ground cherries, herbs, kale, kohlrabi, leafy greens, leek, lettuce, melon, onion, pea, pepper, potato, parsnip, pumpkin, radish, squash, shallot, spinach, sweet potato, tomato, tomatillo and turnip.

B Fruits and nuts Include apple, apricot, blackberry, blueberry, boysenberry, cherry, chestnut, citrus, fig, grapes, nectarine, olive, peach, pear, persimmon, plum, pluot, pomegranate, prune, raspberry, and strawberry. Wine grapes are calculated separately.

C Red wine grape varieties include barbera, basturdo, bracciano, cabernet franc, cabernet sauvignon, cagnane, carmine,

21  
20

## NURSERY PRODUCTS

	Acres	NO. of Trees	Value
↑ 1% Nursery	6		\$483,900
		5	\$480,000
↑ 9% Cut Flowers	8		\$237,300
		7	\$218,100
↓ -25% Christmas Trees		1800	\$89,000
		2150	\$110,900
<b>Total Nursery:</b>			\$810,200
			\$809,000

## TIMBER

	Amount	\$/MBF <sup>E</sup>	Value
↓ -57% Timber	7,326 MBF	\$111.08	\$813,800
	13,545 MBF	\$141.01	\$1,910,000

cinsaut, corvina, dolcetto, grenache, legrein, malbec, merlot, montepulciano, mouvedre, petite sirah, petite verdot, primitivo, refosco, sangiovese, syrah, tempranillo, teroldego, tinta cao, tinta negra mole, tournet, touriga nationale and zinfandel

D White wine grape varieties include chardonnay, chenin blanc, falenghina, fiano, flora, forastera, marsanne, melon, muscat orange, peverella, pinot gris, rkatsiteli, rousanne, sauvignon blanc, semillon, tocai friulano, vespaiola, and viognier

E Milled Board Feet

Numbers may not compute exactly due to rounding.



# LIVESTOCK, POULTRY AND LIVESTOCK PRODUCTS

		Head <sup>1</sup>	\$/Head	Value
↑	 Steers	4,100	\$1,255,	\$5,145,500
26%		4,100	\$1,000	\$4,100,000
↑	 Cows	2,100	\$1,174	\$2,465,400
2%		2,100	\$1,150	\$2,415,000
↑	 Sheep & Lambs	1,300	\$192	\$211,200
25%		1,300	\$130	\$169,000
↓	 misc livestock <sup>2</sup>			\$216,900
-15%				\$250,500
↑	 Specialty <sup>3</sup>	200		\$794,200
158%		219		\$308,400
<b>Total Livestock:</b>				\$8,833,200
				\$7,242,900



<sup>1</sup> Number of head as of January 1, 2022

<sup>2</sup> Includes poultry, goats, hogs and wool

<sup>3</sup> Junior Livestock Auction, 2020 numbers were misreported in 2020 Crop Report, this is the correct amount.

Numbers may not compute exactly due to rounding



21  
20

## APIARY AND EGG

	Amount	\$/Unit	Value
 -15%  Apiary <sup>4</sup>	3100 hives	---	\$316,400
	3300 hives	---	\$370,700
 20%  Honey	25,300 lbs	\$5.31	\$134,600
	26,500 lbs	\$4.25	\$112,600
 17%  Eggs <sup>5</sup>	22,300 doz	\$7.29	\$162,600
	18,715 doz	\$7.20	\$134,800
			\$613,600
			<b>\$618,100</b>

## PASTURE AND RANGELAND

	Amount	\$/Acre	Value
 0%  Pasture	10,000 ac	\$180	\$1,800,000
	10,000 ac	\$180	\$1,800,000
 0%  Rangeland	95,000 ac	\$20	\$1,900,000
	95,000 ac	\$20	\$1,900,000
			\$3,700,000
			<b>\$3,700,000</b>

Total Pasture and Rangeland: \$3,700,000  
**\$3,700,000**

<sup>4</sup> Includes wax, queens, nucs, and in-county pollination

<sup>5</sup> Corrects a miscalculation in the price per dozen of eggs in the 2020 Crop Report. Numbers may not compute exactly due to rounding

# AGRICULTURE AND WATER

## Water That Feeds the World

California's economy and culture have always been shaped by the abundance or scarcity of water. The Golden State's economy, agricultural production, and population have grown to number one in the nation, largely in pace with the development of its water resources.

California's agricultural success would not be possible without irrigation. In an average year, approximately 9.6 million acres are irrigated with roughly 34 million acre-feet of water; an amount that would cover 31 million football fields with 1 foot of water. Most of this irrigation water is used very efficiently. California receives 75 percent of its water as rain and snow in the watersheds north of Sacramento. -water.ca.gov

## Hydrology

Surface water drainage within Nevada County is composed of three separate watersheds that when combined produce enough water to serve portions of both northern California and western Nevada. The three major watershed areas include: the Truckee River Basin, the Yuba River basin, and the Bear River basin.

Many of the creeks and rivers in the county supply both water and hydroelectricity. A variety of impoundments, canals and diversions serve to direct water to these uses. As would be expected, all of the hydrologic features in the county depend on winter rain and snowfall. The Sierra snowpack is the primary source of water throughout the watersheds. The seasonal as well as annual water flows are highly variable, with rainfall peaks typically occurring between November and February, and snow-melt-related peaks typically occurring between April and June. -Nevada County General Plan Vol 2 Pg 142

## What Is A Watershed?

A watershed is the land area that channels rainfall and snowmelt to creeks, streams, and rivers, and eventually to outflow points such as reservoirs, bays, and the ocean. Watersheds follow natural boundaries and are usually separated from one another by ridges or mountains. It may be as small as a patch of land draining into a tiny pond or as large as the Sacramento River Basin, which drains an area about 27,000 square miles.

Healthy watersheds provide many ecosystem services including, but not limited to: nutrient cycling, carbon storage, erosion/sedimentation control, increased biodiversity, soil formation, wildlife movement corridors, water storage, water filtration, flood control, food, timber and recreation, as well as reduced vulnerability to invasive species, the effects of climate change and other natural disasters. These goods and services are essential to our social, environmental and economic well-being.

Maintaining healthy watersheds and increasing watershed resiliency is key to mitigating the effects of climate change on source headwater watersheds.

-water.ca.gov





## Development of Ag and Irrigation

Agriculture has always been an integral part of Nevada County and has continually grown and changed along with the county. The beginning of major agriculture pursuits began concurrently with the discovery of gold in California. With the sudden influx of miners there was also a need for food. This need, along with the high prices miners were willing to pay, made it attractive for farmers (many of whom had been miners) to start raising crops in the western end of the county. This area, with its mild climate and good soils, attracted a large number of farmers who grew a variety of crops, including fruit of all varieties, small grains, hay, potatoes, and wine grapes. Some citrus was attempted at the extreme southwestern corner of the county. Sheep and cattle were raised in large quantities, utilizing the high mountain ranges in summer and the oak woodlands for winter grazing.

One commodity, often not thought of as agriculture, that was harvested extensively in this period was timber. During the initial phase of placer mining, the demand was mainly for construction lumber. With the advent of hardrock mining, the demand for mining timbers expanded greatly, and much of the easy-to-reach virgin forest was cut at this time. Most of the timber in the western county today is second or third generation which reseeded from the initial stand.

During the 1800s and early 1900s, the most limiting feature for agriculture in the county was the lack of irrigation water. This was changed dramatically in 1921 with the formation of the Nevada Irrigation District.

This was the first in a series of steps which culminated in reliable irrigation water being delivered to many county farmers. With the availability of irrigation water, the number of livestock increased sharply and dairies in particular began to flourish, as farmers were able to grow larger quantities of hay for feed.

Agricultural production in the county reached a peak in total acreage and head of livestock during the period before World War II. During the post World War II era, timber continued to be a strong industry. With thousands of acres of prime timber soils, and moderate climate, the county was able to produce millions of board feet of lumber a year to supply the increasing demand for lumber in the growing state.

The last 20 years have been a time of considerable change for agriculture in Nevada County. Land prices have escalated rapidly and the pressure to subdivide large tracts of historical farmlands has increased. However, there has also been growth in the number of farms and with that expansion has come the diversification of cropping systems. Many types of exotic livestock, including llamas, ostriches, colored sheep and pot-belly pigs, as well as the more historical types of livestock, are raised in the county. Numerous fruit and nut crops are also raised with the wine grape industry attracting national attention. Other diversified agricultural businesses include specialty nurseries, herb farms, mushroom farms, aquaculture, Christmas tree farms and fuelwood lots.

-Nevada County General Plan Vol 1 Pg 11-1

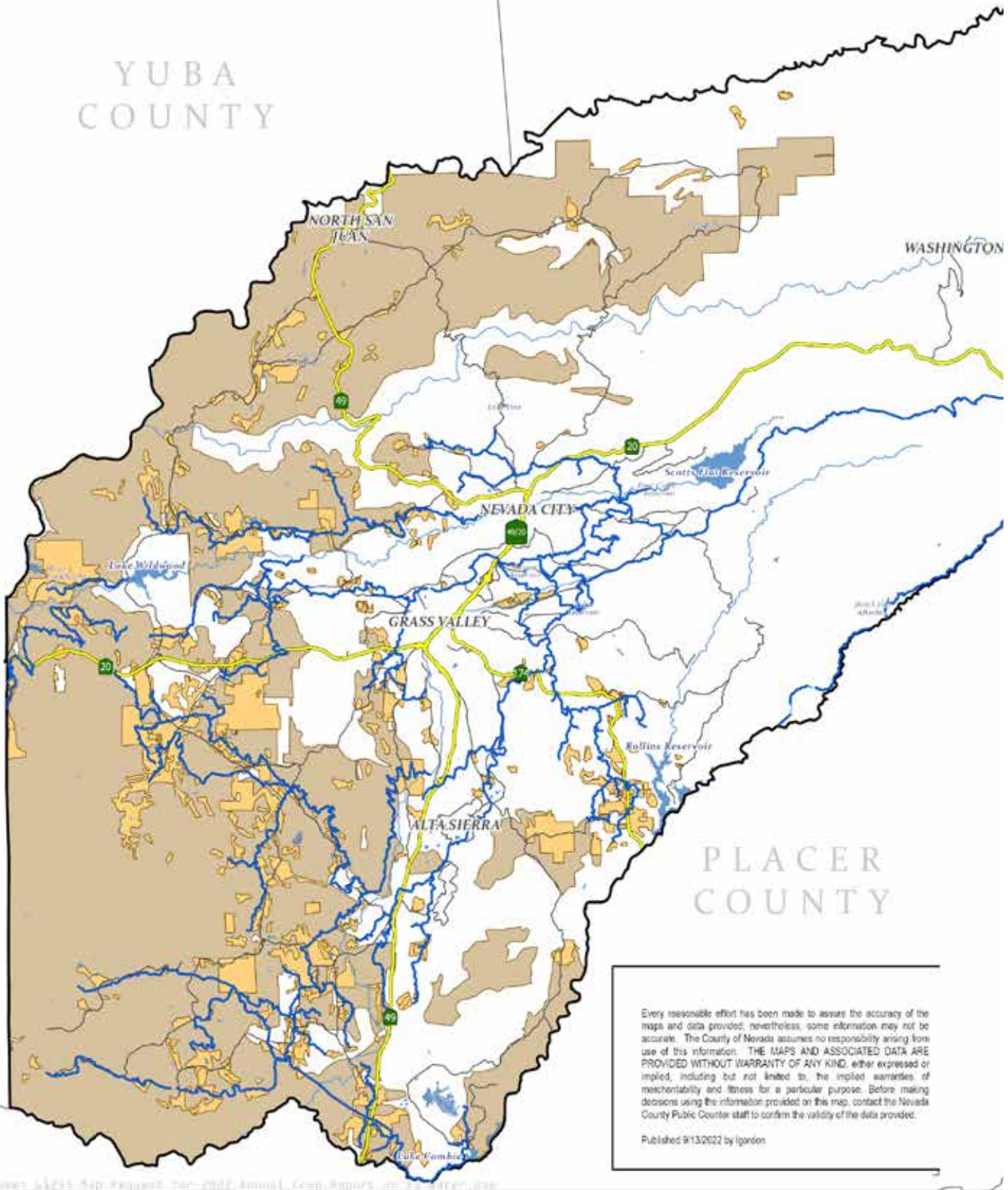




# WATERSHED OVERVIEW

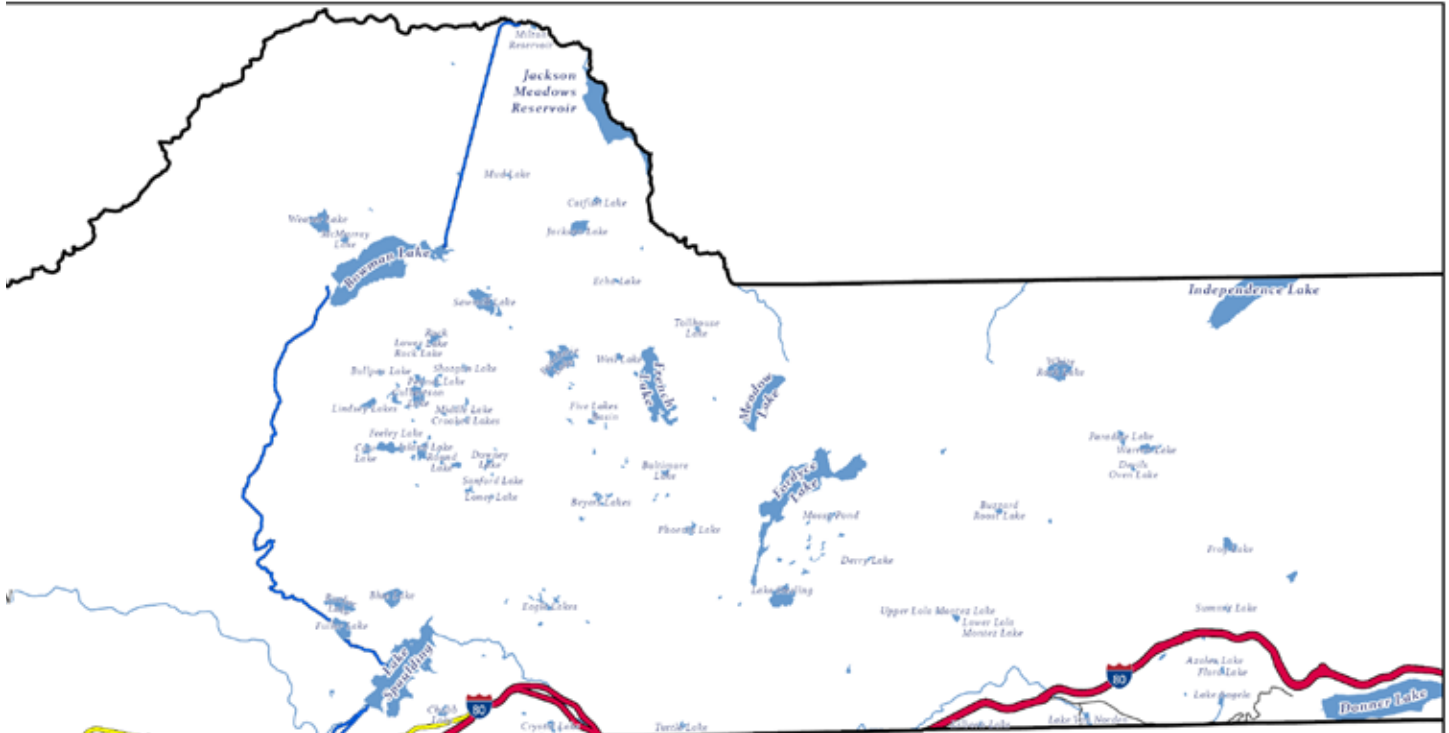
SIERRA  
COUNTY

YUBA  
COUNTY



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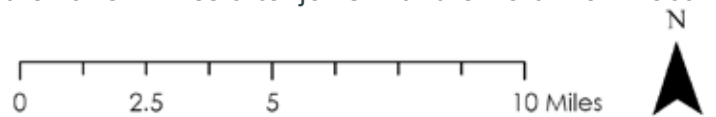


The primary watersheds of Nevada County are comprised of the Bear River, South Yuba and Middle Yuba Rivers. The Bear River is the second largest tributary to the Feather River, with a watershed area of 300 square miles. The river begins in Bear Valley below Immigrant Gap and forms much of the boundary between Nevada and Placer Counties. The Bear River Watershed is wedged between two much larger watersheds, the Yuba to the north and American to the south.

The watershed is heavily managed for water conveyance for agricultural water supply and hydropower development that serves the western foothills region and beyond. Areas of the watershed have been severely degraded by historical hydraulic mining and mercury contamination.

The South Yuba originates at Donner Pass at the crest of the Sierra Nevada, near the town of Soda Springs. Gathering numerous snow-fed tributaries, it runs west through a marshy, lake-filled valley, shadowed by Interstate 80. The river then flows through Lake Spaulding, then plunges northward into a steep-sided valley and continues west into the foothills, crossing under State Route 49 before joining the main Yuba River at Enbleight Reservoir.

Originating in Moscové Meadow, the Middle Yuba flows north into Jackson Meadows Reservoir, then turns west, and defines the boundary between Nevada and Yuba Counties. It intersects California State Route 49 about 2 miles (3.2 km) northwest of North San Juan, then a few miles after joins with the North Fork Yuba River.



**NEVADA  
COUNTY**  
CALIFORNIA

— Highways  
— Major Roads

— Lakes  
— Major Rivers  
— Irrigation Canals

Farmland Type  
 Farmland  
 Grazing Land



## Nevada Irrigation District (NID)

On August 15 1921, the Nevada Irrigation District was established under the Irrigation District Act of 1897. Originally organized for the purpose of storing and delivering irrigation water to farmers and ranchers, NID today encompasses 287,000 acres and covers portions of three counties: Nevada, Placer, and Yuba. NID collects raw water from the Yuba and Bear River watersheds, transporting it from high elevation mountain reservoirs to the lower elevation foothills. While a portion of the water is treated for human use, the bulk of the water is used for agriculture.

NID is instrumental for delivering raw water to the many ranches and farms in operation throughout the county via canals and pipelines.-NID AWMP 2020

## Drought and Climate Change

Although Californians have experienced drought before – they are a recurrence given the state’s Mediterranean climate characterized by warm, dry summers and mild winters – the four-year period between fall 2011 and fall 2015 was the driest since record keeping began in 1895. The drought was worsened in 2014 and 2015 with the two hottest years recorded in the state’s history. The National Weather Service defines a drought as a deficiency in precipitation over an extended period resulting in water shortages that cause adverse impacts on vegetation, animals and

people. The implications of drought are significant. The primary source of the state’s water supply is precipitation in the form of rain and snow. Most importantly, the Sierra Nevada mountain range accumulates snowpack during the winter that slowly melts in late spring. This natural pattern allows for runoff to flow downstream and fill reservoirs for consumptive and environmental use throughout the summer. In fact, Sierra snowpack stores about 65 percent of California’s total water supply and historically can be categorized as California’s largest natural reservoir.

A growing concern is climate change. A University of California, Los Angeles (UCLA) study in 2018 found that in the Sierra Nevada foothills climate change will raise temperatures between 5 and 7 degrees by the end of the century if carbon emissions are not significantly reduced. Higher in the mountains, NID’s primary water source, the effects of climate change already are being felt.

The water flows into reservoirs and conveyance systems, and then downstream for irrigation and household use. Studies indicate climate change is expected to shrink the Sierra snowpack as temperatures heat up and more precipitation falls as rain rather than snow. This will limit the availability of water, lessen the dependability of water system infrastructure and diminish the quality and health of the local watersheds. -NID AWMP 2020





# WEIGHTS AND MEASURES

The Nevada County Agricultural Commissioner is also the Sealer of Weights and Measures, which plays a vital role in the economic activity of the county.

The department serves the community by safeguarding and measuring accuracy and assuring confidence and integrity in the marketplace. The benefit our office provides ensures fair competition for industry and accurate value comparison for consumers.



The weight truck both carries certified weights, and is a certified weight itself.

As a neutral third party between buyers and sellers we:

- Test weighing and measuring devices for accuracy
- Examine and evaluate the work of service repairmen
- Verify the quantity of bulk and packaged commodities
- Check consumer packages for proper labeling
- Inspect price scanner systems for accuracy
- Review weighmaster certificates and licensing requirements
- Regulate the advertising, labeling and quality standards of petroleum products

Measuring Devices	# of Devices	Weighing Devices	# of Devices
<b>CNG</b>	<b>2</b>	<b>Class II Scales</b>	<b>104</b>
<b>Domestic Water Submeters</b>	<b>1,206</b>	<b>Computing Scales</b>	<b>287</b>
<b>Electric Submeters</b>	<b>1,359</b>	<b>Counter Scales</b>	<b>173</b>
<b>Fabric, Cordage &amp; Wire Meters</b>	<b>14</b>	<b>Dormant/Port Plat &gt;=2,000 lbs</b>	<b>16</b>
<b>LPG Dispensers</b>	<b>71</b>	<b>Hanging Scales</b>	<b>21</b>
<b>Retail Motor Fuel Meters</b>	<b>834</b>	<b>Hopper &amp; Tank Scales</b>	<b>4</b>
<b>Taxi Meters</b>	<b>3</b>	<b>Livestock &amp; Animal &gt;=2,000 lbs</b>	<b>4</b>
<b>Vapor Submeters</b>	<b>1,800</b>	<b>Misc. Weighing Devices</b>	<b>7</b>
<b>Vehicle Meters</b>	<b>21</b>	<b>Vehicle Scales</b>	<b>11</b>
<b>Wholesale Meters</b>	<b>2</b>	<b>Total Weighing Devices</b>	<b>631</b>
<b>Total Measuring Devices</b>	<b>5,296</b>		

# PEST EXCLUSION AND DETECTION REPORT

## Exclusion

All incoming plants and other host material originating from known areas of pest or disease infestations are inspected to help protect Nevada County. The introduction of Glassy-winged Sharpshooter (GWSS) or European Grapevine Moth (EGVM) are potential threats to the production of winegrapes in our area.

Out-of-state shipments may contain pests or diseases of economic importance, such as the Spongy Moth (SM) and Sudden Oak Death (SOD). The state agriculture border stations notify us of incoming shipments. When a shipment arrives, it is inspected for pests, general cleanliness, and compliance with all applicable federal, state and county regulations. County biologists also inspect agricultural packages at the UPS and FedEx sorting facilities in Grass Valley each morning.

In 2021, approximately 5,223 packages and 403 nursery shipments were inspected for live exotic pests, and resulted in 2 live pest finds.



Luci Wilson inspects ag packages at FedEx.

## Detection

Nevada County's insect trapping program monitors for populations of pests that cause potentially devastating crop, forest and ornamental plant damage. Traps are placed throughout the county in host plants and high-risk areas, and are inspected by county staff every two weeks during the trapping season. Suspect insects are sent to the California Department of Food and Agriculture Lab for evaluation.

<b>Pest</b>	<b>No. of Traps</b>
<b>Spongy Moth (GM)</b>	<b>197</b>
<b>Japanese Beetle (JB)</b>	<b>12</b>
<b>European Grapevine Moth (EGVM)</b>	<b>34</b>
<b>European Grape Berry Moth</b>	<b>47</b>
<b>European Pine Shoot Moth (EPSM)</b>	<b>23</b>
<b>Glassy-winged Sharpshooter (GWSS)</b>	<b>87</b>
<b>Exotic Fruit Flies*</b>	<b>24</b>



Japanese beetle trap, photo courtesy of CDFA

\*Exotic fruit flies include Mediterranean fruit fly, melon fruit fly and oriental fruit fly.

# INSECT FOCUS: SPOTTED LANTERNFLY

**SCIENTIFIC NAME:** *Lycorma delicatula*

The spotted lanternfly (*Lycorma delicatula*) (SLF) is an invasive pest, primarily known to feed on tree of heaven (*Ailanthus altissima*) but has many other host plants, including grape, hop, apple, stone fruit, maple, poplar, walnut, and willow. If allowed to spread in the United States, it could impact the country's fruit, ornamental, and forest industries. Early detection is critical to prevent economic and ecological losses. The public will play a key role in detecting spotted lanternfly and the success of stopping its spread depends on help from the public to look for and report signs of the pest.

The spotted lanternfly is an invasive plant hopper that is native to China and likely arrived in North America hidden on goods imported from Asia. Spotted lanternflies are invasive and can spread rapidly when introduced to new areas. While the insect can walk, jump, or fly short distances, its long-distance spread is facilitated by people who move infested material or items containing egg masses. The spotted lanternfly lays eggs on almost any surface, including vehicles, trailers, outdoor equipment, and patio furniture.

Both nymphs and adults of spotted lanternfly cause damage when they feed, sucking sap from stems and branches. This can reduce photosynthesis, weaken the plant, and eventually contribute to the plant's death. In addition, feeding can cause the plant to ooze or weep, resulting in a fermented odor, and the insects themselves excrete large amounts of fluid (honeydew). These fluids promote mold growth and attract other insects.



Spotted Lanternfly life stages, courtesy of National Park Service

## Key Features:

- Large in size (up to 25 mm long) & colorful.
- Detected in 2014 in Pennsylvania.
- Likely hitchhiked as egg mass on imported stone or associated packing materials.
- Lays eggs on any flat surface, including objects like the sides of trains including tree trucks as well as random non-living objects such as vehicles.
- Feeds on tree of heaven (*Ailanthus altissima*), but also appears to be preferring grape in North America.



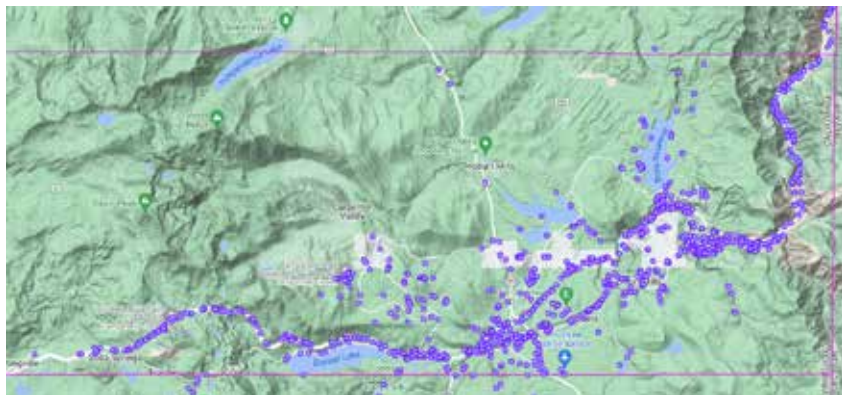
# INVASIVE PLANT REPORT

The Nevada County Agriculture Commissioners Office is tasked with protecting the agriculture and natural resources of the county. This includes management and eradication of noxious invasive plants. The species we target in Nevada County include, but are not limited to mostly A- and B-rated weeds.

When sites are located on private property, we work with the landowner to gain access and permission to treat. Methods used to eradicate these unwanted plants include hand pulling, shoveling, and herbicides. If herbicide treatment is required, we use a selective product that only acts on the target plants. When utilizing herbicides we spot spray, leaving non-target plants unaffected, thereby mitigating herbicide drift and damage to sensitive sites. Proper weed eradication and management takes many years, and repeat visits to each site are necessary.

## Noxious Weed Control Benefits:

- Safeguard our natural infrastructure
- Strengthen climate resiliency
- Protect our water resources
- Decrease wildfire risk
- Preserve biodiversity
- Maintain our agricultural production
- Provide recreational opportunities



Sites of invasive weeds in eastern Nevada County.

Weed Species	No. Of Sites	Treatment Method
<b>Canada Thistle</b>	<b>3</b>	<b>Mechanical/Chemical</b>
<b>Dalmation Toadflax</b>	<b>11</b>	<b>Chemical</b>
<b>Diffuse Knapweed</b>	<b>4</b>	<b>Mechanical/Chemical</b>
<b>Klamathweed</b>	<b>5</b>	<b>Mechanical/Chemical</b>
<b>Lens-podded Hoary Cress</b>	<b>3</b>	<b>Mechanical/Chemical</b>
<b>Musk Thistle</b>	<b>97</b>	<b>Mechanical/Chemical</b>
<b>Myrtle Spurge</b>	<b>1</b>	<b>Chemical</b>
<b>Oblong Spurge</b>	<b>15</b>	<b>Mechanical/Chemical</b>
<b>Perennial Pepperweed</b>	<b>60</b>	<b>Chemical</b>
<b>Purple Loosestrife</b>	<b>3</b>	<b>Mechanical</b>
<b>Rush Skeletonweed</b>	<b>45</b>	<b>Chemical</b>
<b>Russian Knapweed</b>	<b>4</b>	<b>Mechanical/Chemical</b>
<b>Spotted Knapweed</b>	<b>85</b>	<b>Chemical</b>
<b>Yellow Starthistle</b>	<b>10</b>	<b>Chemical</b>

## PLANT FOCUS: RUSH SKELETON WEED

**SCIENTIFIC NAME:** *Chondrilla juncea*



Flower stem of rush skeleton weed, photo courtesy of CDFA

Rush skeleton weed is a perennial forb that can grow up to 4 ft. tall. Coarse-looking, multiple stems appear leafless due to inconspicuous leaves and arise from a basal rosette of sharply lobed leaves. The lower 4-6 in. of the stem is covered with coarse brown hairs. Both stem and leaves produce a milky sap when broken. The flowers of rush skeletonweed are small and yellow and develop in the mid-summer to fall. Mature, healthy plants can produce 1,500 flower heads and up to 20,000 seeds.

Rush skeletonweed invades dry rangelands in the Western U. S., displaces native species, and reduces forage for livestock and wildlife. It is native to Europe, Asia, and Africa and was accidentally introduced to the U. S. as a contaminant of fodder in 1914.

In Nevada County infestations range from west to east and can be encountered in rangeland areas, as well as disturbed sites.

Mature rush skeleton weed, photo by Joseph M DiTomaso





## ENVIRONMENTAL PROTECTION & PESTICIDE USE ENFORCEMENT PROGRAM

Under state and federal law, a pesticide is any substance intended to control, destroy, repel, or attract a pest. Pesticides are chemicals designed to be harmful to a target pest and purposely introduced into the environment to do their job of managing insects, bacteria, weeds, rodents, or other pests. Pesticide refers to not only insecticides but many other kinds of chemicals, including herbicides, fungicides and rodenticides.

The Nevada County Agricultural Commissioner's Office protects human health and the environment by regulating pesticide sales and use, and by supporting integrated pest management and best practices. We work closely with the California Department of Pesticide Regulation (DPR) to enforce state laws and regulations pertaining to pesticide use, sales, licensing, worker safety, and pesticide use reporting.

- Performing inspections, compliance monitoring, and compliance assistance that focus on protecting pesticide applicators and workers;
- Investigating all priority pesticide related incidents and illnesses;
- Issuing CEQA-compliant pesticide permits for the use of commercial quantity products, including herbicides;
- Enforcing the requirements of pesticide product labeling and ensuring safe use.

## PPE DISTRIBUTION

Our department initially received N95 masks to distribute to farmworkers during the personal protection shortage experienced during the initial months of the Covid-19 pandemic in 2019. Unfortunately we found a new need for masks with each wildfire season. When air quality becomes hazardous for anyone working outside, our farmers still have livestock to manage and crops to tend and harvest. We have continued to distribute N95 masks during periods of active wildfires with impacted air quality. In the last three years we have distributed 1,542 masks for local farmers and ranchers during the Jones Ridge, Bear River, Mosquito and other fires.

River Fire 2021, courtesy of CBS News





## DIRECT MARKETING REPORT

Local farmers' markets allow producers to sell their certified commodities directly to the public. There were 27 certified producers that were issued certificates in Nevada County in 2021. The following 6 Farmers Markets have been certified by the Agricultural Commissioner to market local and regional produce in Nevada County. These producers offer a wide variety of commodities, including fresh produce, herbs, mushrooms, flowers, honey, nursery stock, eggs, meat and poultry.

### CERTIFIED FARMERS MARKETS

#### Grass Valley

Raley's Pine Creek Center  
Saturday 8am–12:30pm

May–November

Raley's Pine Creek Center

Tuesday 8am–1pm

May–September

Mill Street

Thursday 6pm–9pm

May–August

#### Penn Valley

Western Gateway Park

Thursday Summer: 9am–1pm,

Winter: 10am–2pm

#### Nevada City

Union Street

Saturday

Summer: May–December  
8:30am–1pm,

Winter: 1st & 3rd Saturdays  
January–April 9am–noon

#### Truckee

Truckee River Regional Park

Tuesday 8am–1pm

May–October



Monica Weakley, Brianna Abundiz and Olivia Steele at Food Love Farm

## ORGANIC

Organic farming practices focus on maintaining ecological health and balance through promoting biodiversity and soil health while minimizing pollutants. Organic farming practices exclude the use of synthetic pesticides and fertilizers as well as genetically modified organisms.

Consumer demand for certified organic products continues to increase, with an expectation that organic products are verifiable. All organic producers in California must register with the California Department of Food and Agriculture's Organic Program. The County Agricultural Commissioner's Office performs inspections on behalf of California Department of Food and Agriculture (CDFA) for first-time registrants and producers that make less than \$5000 in annual sales, and conducts spot checks at farmers markets.

In 2021, 47 organic producers were registered with growing sites in Nevada County. For more information on the Organic Food and Farming Act, please visit the California Department of Food and Agriculture's State Organic Program website at <https://www.cdfa.ca.gov/is/organicprogram/>.



# FARM DAY 2022



On September 14th, 2022, Nevada County Ag in the Classroom hosted its Annual Farm Day at the Nevada County Fairgrounds. This popular event was open to all Nevada County's 2nd, 3rd and 4th graders. This year we hosted 820 children including FFA guides and had over 30 exhibitor stations that featured many different aspects of agriculture presented by people working in the field. This hands on experience included a farrier shoeing a horse; cows, chickens, rabbits, alpacas; and many other stations where children learned about the value of agriculture.

Our Farm Day is designed to help students acquire the knowledge necessary to understand where their food and fibers come from. Agriculture is everywhere. It is the food we eat, the clothes we wear, the houses we live in, and the plants we enjoy. A well-rounded education should include hands-on experiences and true-to-life learning at the most fundamental level. By exposing students to agriculture through engaging lessons and activities, we hope students will be inspired to continue to learn about food and fiber and, ultimately, gain an appreciation for all that agriculture provides.

Stakeholders included Nevada County Resource Conservation District, Nevada County Farm Bureau, Nevada County Ag Commissioner, Placer/Nevada Cattle Women, Sierra Harvest, and the Nevada County Fairgrounds.

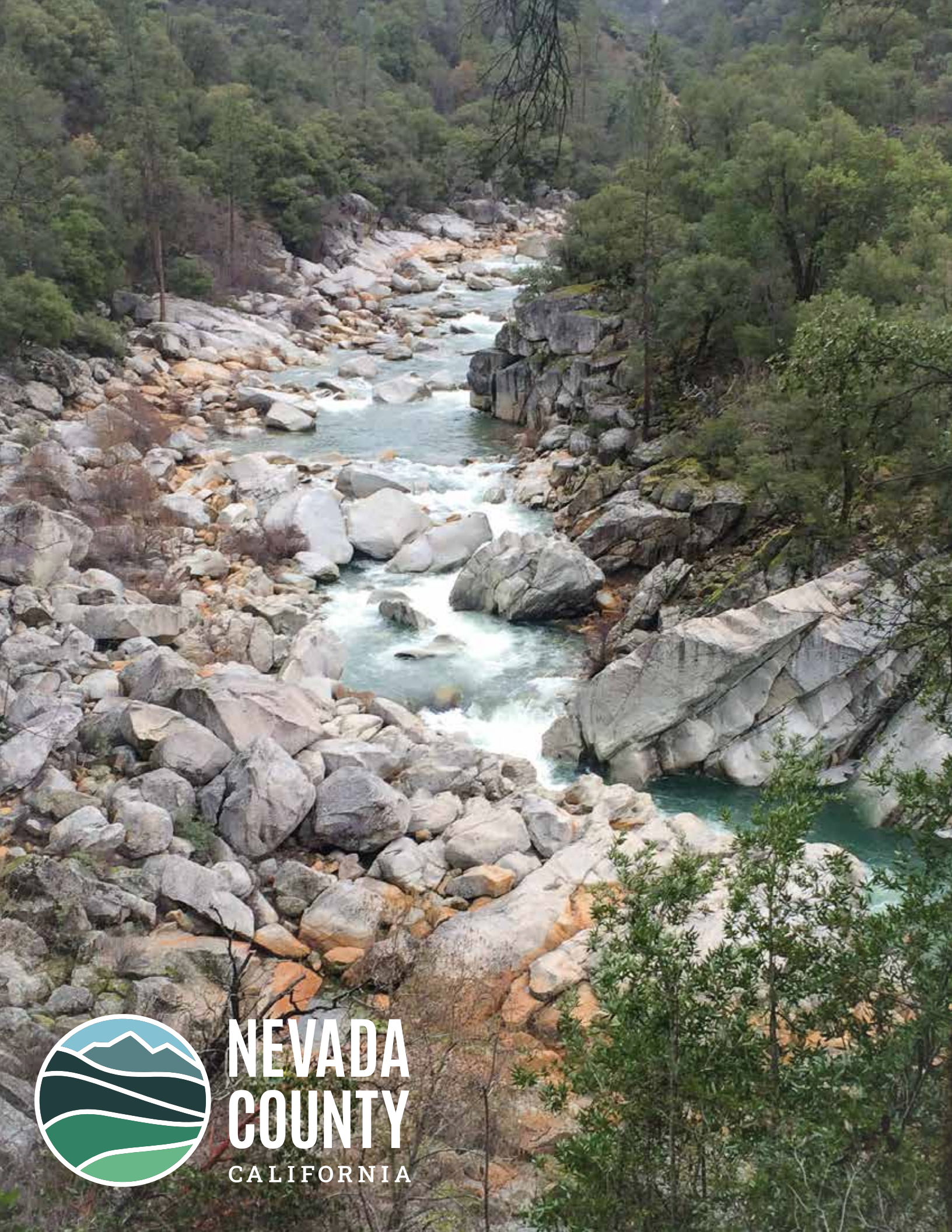
From top to bottom: Tony Romero/Nevada County Ag Dept, Mariah de Nijs and dog Taz/Sacramento Count Ag Dept, Golden West Bees. Photos courtesy of NCRCD











**NEVADA  
COUNTY**  
CALIFORNIA