

SACRAMENTO REGION

Coordinated Rural Opportunities Plan

March 2024

El Dorado County Profile









Introduction

The Coordinated Rural Opportunities Plan (CROP) is funded by the Department of Conservation's Sustainable Agricultural Lands Conservation (SALC) Program and is a joint effort between the Sacramento Area Council of Governments (SACOG) and Valley Vision. CROP is part of the Rural-Urban Connections Strategy (RUCS) to enhance rural economies and the natural assets that drive them. CROP will result in comprehensive profiles of each

FOOD SYSTEM INFRASTRUCTURE



Improves the efficiency, sustainability, and productivity of the local food system



Increases and access to nutritious, local, and seasonal foods in historically disinvested communities



Supports the viability of agriculture, addresses climate challenges, and helps preserve valuable farmlands



Creates new jobs, supports food and agrelated businesses, spurs innovation, and provides economic opportunities

county in the Sacramento region, in addition to a region-wide profile. The profiles will serve as valuable resources for identifying priority areas for infrastructure investments and programs that will strengthen the region's food and agricultural cluster. Furthermore, CROP will provide county and regional leaders the opportunity to address infrastructure investment challenges and collectively come together to find solutions that will add to the region's agricultural sustainability and long-term economic health and resiliency.

Agriculture is deeply rooted in the rich history of the Sacramento region and continually contributes to its unique identity. Leading America as the Farm to Fork Capital, the Sacramento region provides \$2.2 billion in farmgate output value, and the agricultural economy is valued at more than \$12 billion¹. The food and agriculture cluster consists of crop production, packaging and processing, distribution, and related operations and industries. Although the agricultural sector sustains the region's robust economy, infrastructure challenges are impeding the ability of the six counties to advance sustainable food production and supply chains, statewide and globally.



BACKGROUND:

El Dorado County

El Dorado County's scenic beauty can be attributed to its abundant natural resources and spectacular landscape. With the discovery of gold, El Dorado was one of California's original counties when the state was established in 1850. When gold became less abundant and mining operations dwindled, prospectors sought out other industries and resources to make a living, including agriculture. Similar to other counties in the region, El Dorado County has diverse topography, including the Sierra Nevada mountains, foothills, and several rivers and lakes, as well as suitable climate and fertile soils. Unlike other counties in the region, El Dorado County has two regional planning agencies, as well as its own regional transportation planning agency, El Dorado County Transportation Commission (EDCTC). The Sacramento Area Council of Governments SACOG is the metropolitan planning organization covering the western portion of the county ("West Slope") and the eastern portion of the county ("Tahoe Basin") is covered by the Tahoe Regional Planning Agency's jurisdiction.

The county's natural and built environment includes parts of the El Dorado and Tahoe National Forests, the American River and Cosumnes River watersheds, and its two incorporated cities, Placerville and South Lake Tahoe. El Dorado County also contains part of Lake Tahoe, which is the largest alpine lake in North America. The county's total population is 189,006. Most residents (82.4%) live in unincorporated areas, with only 5.6% of residents living in Placerville and 12% living in South Lake Tahoe.² Forest land occupies 55% of the county's landbase. More than half of the county's farmland is used for pasture and grazing, while only 9% is cropland.3 El Dorado County's agricultural land and federally-managed land contribute to the county's rural lifestyle, and attract many visitors who are drawn to the county's beautiful landscape and abundant recreational and tourism opportunities. Beyond the diverse mountain-based activities, El Dorado is home to Apple Hill, a notable regional agritourism destination, as well as a robust winery industry.

² https://edcgov.us/Government/CAO/Documents/2022-2023%20Budget/El%20Dorado%20County%20Profile%20Demographic%20Data%20FY22-23.FINAL.pdf

El Dorado County's Top Five 2022 Commodities

- 1. Livestock
- 4. Apples
- 2. Timber
- 5. Wine Grapes
- 3. Hay/Pasture

The top 5 commodities in El Dorado County were valued at \$38,465,872 in 2022, down 38% from \$62,008,326 in 2021⁴



The fluctuating output of El Dorado's agricultural sector illustrates both the variability of the larger market and environmental forces, as well as the need for ag-supporting infrastructure to protect against some of this variability. For example, the value of the county's timber output increased by two-thirds in 2022, largely due to production resuming after the 2021 Caldor Fire. Yet while timber production increased in 2022, the county's overall gross agricultural value fell by 40%, as a



late freeze hurt the all-important apple and wine grape crops. Such impacts affect not just the county's direct farmgate output (valued at around \$50 million in 2022) but also the much larger food system. El Dorado County estimates Apple Hill and related value-add activities bring \$350 million a year into the county economy, with another \$250 million coming from the wine industry. Agriculture occurs at various scales across the county, with almost all productions in the unincorporated areas. Each county has an Agricultural Commissioner's office appointed by its Board of Supervisors to administer county-wide activities in support of agriculture. Given this nexus, many of the examples and recommendations in this profile focuses on the County of El Dorado as a potential lead, while also highlighting the role of additional partners such as other local jurisdictions, regional agencies, special districts or conservation entities.

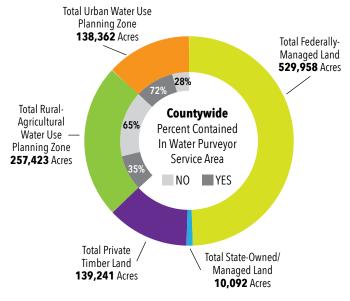




WATERInfrastructure

History and the natural landscape have shaped the development of water resources in El Dorado County. Many parts of the county, mostly rural and agricultural areas, are not serviced by a water purveyor and are dependent on groundwater from the Tahoe West Subbasin and the Tahoe South Subbasin. Water infrastructure in the Tahoe Basin is more built out than in the West Slope due to years of planning and development in the Basin. Additionally in the West Slope, local fractured rock formations in aquifers have resulted in limited and unreliable groundwater supply. Due to these reasons, along with variable surface water and climate change factors, many rural and agricultural communities do not have reliable access to water.

Agricultural irrigation water is mostly provided by one of three methods: water purveyors (El Dorado Irrigation District and Georgetown Divide Public Utility District); fractured rock (wells drilled into granite); and surface water from ponds and springs.⁵ Approximately 65% or 257,423 acres of the Rural Agricultural Water Use Planning Zone in the West Slope of the county are not currently within water purveyors' existing service areas (see chart below).^{6,7} This can cause long lead times to acquire the water and infrastructure to provide reliable water supplies to these areas, which impacts economic growth and development. Additionally, water infrastructure in the West Slope is susceptible to wildfires and landslides.⁸ The water conveyance infrastructure includes historic unlined ditches and wooden flumes (canals). These wooden flumes and unlined ditches are major water conveyances in the West Slope, and interruption of water supply due to fire damage would significantly hinder water deliveries.

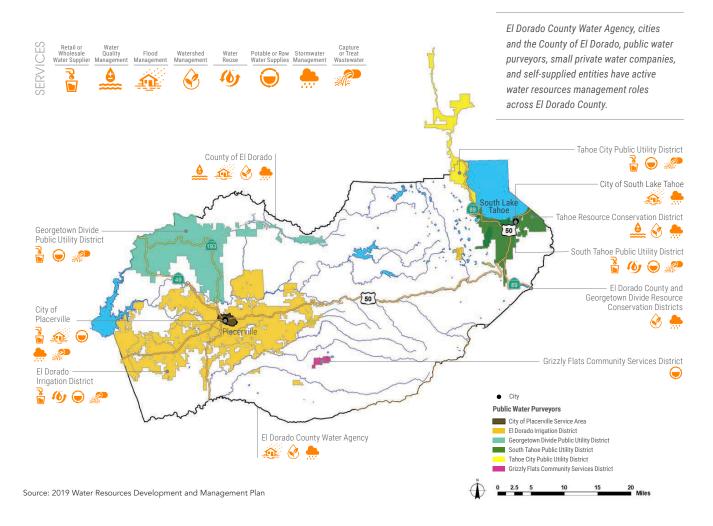


Source: El Dorado County Water Agency – Water Resources Development and Management Plan

⁵ http://eldoradoagwater.org/wp/wp-content/uploads/2014/01/PILOT-PLAN 02252010.pdf

⁶ https://www.edwateragency.org/Shared%20Documents/2019_WRDMP_Final.pdf

⁷ https://www.edwateragency.org/Shared%20Documents/20201125 EDWA SP Final Web.pdf



Irrigated agricultural operations are concentrated within seven geographically distinct agricultural districts that were identified and established by El Dorado County in the 1990s to protect and enhance agricultural activities. The agricultural districts are located in: Camino/Fruitridge, Garden Valley, Oak Hill, Gold Hill, Coloma, Fairplay, and Pleasant Valley.9

Due to the availability of commercial irrigation water, nearly all major commodities are produced in the Camino/Fruitridge District (Apple Hill), the second largest agricultural district. ¹⁰ The Fairplay District, the largest district located in the south part of the county, lacks commercial irrigation, which results in high concentrations of wine grapes and dry-farmed walnuts in the district. ¹¹

Half of the members of the El Dorado Wine Grape Growers Association are located in the Fairplay district, and if the area was serviced by a water district, additional farms and enterprises could establish themselves, including flower farms, which would diversify opportunities for economic development and agritourism. Without water infrastructure, it is challenging to get growers interested in farming. In 2020, El Dorado Water Agency (EDWA), the County's water resource planning agency, partnered with Davids Engineering to develop the El Dorado County Agriculture Feasibility Assessment. The assessment identifies viable lands and evaluates the potential for continued expansion of irrigated acreage in the future, which the report identified as 41,000-46,000 acres of irrigated land.¹² EDWA is presently pursuing water rights,

⁹ https://www.edcgov.us/Government/ag/documents/PoliciesREAgDistrict.pdf

¹⁰ http://eldoradoagwater.org/wp/wp-content/uploads/2014/01/PILOT-PLAN 02252010.pdf

¹¹ http://eldoradoagwater.org/wp/wp-content/uploads/2014/01/PILOT-PLAN 02252010.pdf

¹² https://www.edwateragency.org/Shared%20Documents/EDC_AgDemandReport_Final.pdf

and the feasibility study to determine specific infrastructure projects will take place after the water rights are obtained.

There is concern that once water infrastructure is developed for agricultural and rural use in the southern portion of the county, the State could potentially take away the County's existing water rights and allocate water to regions where the resource is more scarce. As well, the long term water supply and demand are not balanced. Due to the limited availability of groundwater from local fractured rock aguifers and changes in surface water availability, the El Dorado Water Agency (EDWA) expects water demands to increase and water reliability to decrease. Without sufficient groundwater availability and water management systems in place, the Agency will likely see a long-term reduction in water supply reliability, especially for the West Slope. As a result, EDWA is tasked with providing adequate water supply for current populations and new growth, while also ensuring there is enough water available for agricultural use.

The County's General Plan has an "Other County Areas" (OCA) designation, which is for areas that are not serviced by water purveyors, are federally managed, or are located on private timber land. Communities in the OCAs rely heavily on wells, which is not ideal for agricultural production, agritourism, and agribusiness. Relying on well

water becomes a challenge during times of prolonged drought, as wells often dry up and the quality of the water degrades. Additionally, because OCAs are not actively managed by any agency or are located in a water purveyor's service area, these areas are not covered by existing drought mitigation planning, making it difficult for consistent drought planning efforts in the county. Per the 1949 El Dorado County Water Agency Act, EDWA leads the countywide water planning and management and thereby represents the interests of the OCAs.¹³

The increasing frequency and intensity of wildfires, heat, and drought threaten water quality and water supply availability for both groundwater and surface water. In addition, dense forests can prevent snow from reaching the ground, resulting in reduced water supply for the Tahoe Basin to use as groundwater recharge, and higher than average soil temperatures are melting the snow at a faster rate, along with rising temperatures, impacting surface water availability.¹⁴

To improve existing infrastructure, the El Dorado Irrigation District has issued rate increases for 2024-2028 that will fund bonds to rebuild Silver Lake Dam, rehab the Sly Park intertie, convert wooden flumes to concrete, and replace leaking water lines. ¹⁵ However, the rate increase will significantly impact the cost of agriculture production, particularly for grape growers.



¹³ https://www.edwateragency.org/Shared%20Documents/2019_WRDMP_Final.pdf

¹⁴ https://www.edwateragency.org/Shared%20Documents/2019_WRDMP_Final.pdf

¹⁵ https://www.mtdemocrat.com/news/eid-rate-hikes-not-agreeable/article_849659ec-6c7e-11ee-b1d1-5f3343dc5156.html#:~:text=Rate%20increases%20will%20 be%2012,and%20%2484.7%20million%20in%202028.



Water Infrastructure Recommendations for El Dorado County

CATEGORY	RECOMMENDATION
Small Water Systems and Drought Planning	 As recommended in El Dorado County Water Agency's Water Resources Development and Management Plan: All six water purveyers should coordinate drought planning efforts and water supply needs in El Dorado County to improve communication, information sharing, and advocacy efforts. The County of El Dorado and the El Dorado Water Agency should pursue funding for vulnerability assessments for small water systems, springs, and conveyers that serve agricultural users. In addition to drought and flood preparedness, vulnerability assessments can also be used to leverage state and federal funding.
Water Conveyance Improvements	 The County of El Dorado and El Dorado Water Agency should explore the conveyance needs to improve water access for agricultural users. This effort will help identify the next steps, such as a suitable service provider.



LAND USE

and Housing

Small and family-owned farms are the face of agriculture in El Dorado County. Out of all the counties in the Sacramento Region, El Dorado has the highest percentage of family-owned farms (98%) as well as the lowest percentage of farms that hire farm labor (21%).16 Compared to land owned by corporations or foreign investors, family-owned farms are more likely to have a connection to the community, as well as a long-term commitment to and stewardship of the land and natural resources. However, El Dorado County has the lowest percentage of farmers under the age of 35 in the region, and many young farmers struggle get access to land. Supporting the next generation of growers is critical to the viability of agriculture.

Additionally, 43% of farms in El Dorado County are under 10 acres in size, which is the second highest percentage in the region. Many agricultural parcels are limited in size due to topography and soil conditions.¹⁷ A majority of El Dorado's small farms specialize in grapes, Christmas trees, apples, and a variety of crops or products that cater to local markets and agritourism.

While agritourism is a major economic driver for the county, investment in workforce housing is needed to support the industry. Lack of housing is especially challenging for new and beginning farmers, low-income farmers and growers, and workers who support the agritourism industry, including individuals in upper management. Affordable housing is also a challenge, as many homes are vacation/rental homes and not the primary residences of the owner. State and local policies around alternative housing solutions such as tiny-house villages can be cost-prohibitive. However, these could be ideal agriculture workforce housing solutions and also provide much-needed tourist lodging.

Because of the risk of fire and the cost of increased infrastructure, the location of increased housing should be built in urban areas and along commercial corridors. The downtown corridor of Placerville also has vacant office/commercial spaces that could be repurposed as housing for agricultural workers, which is now easier since SB 6, the Middle Class Housing Act, and AB 2011, the Affordable Housing and High Road Jobs Act, took effect on July 1, 2023.

Zoning and investment costs for hotel and lodging accommodations are barriers for the county's agritourism industry, and as a result, El Dorado County does not have hotel accommodations to sustain viable agritourism development. Much of the land in the rural areas has conditional use permits, which makes development a challenge. Building new accommodations requires a lot of funding, time, and effort (i.e., traffic study

costs, feasibility studies, impact studies, etc.) to get the infrastructure in place. For example, delays in the construction of a hotel in Apple Hill were due to associated high costs. These barriers can deter future economic development in the county, especially in agricultural districts. Increased opportunities for camping, glamping, and farm stays would also support economic development and promote agritourism.

Housing developments put further pressure on agricultural land. Historically, grazing land has been lost on the edges. There is pressure for new growth, especially on the edges of grazing land, coming from interests who want to subdivide the land for housing development. Grazing lands are threatened by growth because they are not in agricultural districts and do not have the associated protections. The 40-acre minimum for grazing lands is low and cuts the carrying capacity of the land for viable livestock operations. There are ordinances, such as the County's ranch marketing ordinance, that support agricultural land uses during off-seasons, but there are still other challenges to ranches, such as code compliance, which limits their capability to do public tours, hay mazes, tractor rides, and other accessory uses. The Williamson Act should be prioritized for keeping land in agricultural production. This would address new growth and housing pressures on grazing lands.

Land Use and Housing Recommendations for El Dorado County

CATEGORY	RECOMMENDATION
Farmworker Housing	 Assess the potential to apply Title 25, Farmworker Housing Grant Program (FWHG), to the entire county. Title 25 was recently approved in Grizzly Flats. Explore funding for affordable housing. The County should consider working with farmworker communities, its incorporated cities, and the El Dorado County Farm Bureau to apply for grants and loans for the construction of affordable housing for farmworkers. Affordable housing should be located in nearby cities where there are more accessible social services.
Visitor Lodging	 Expand uses (lodging) around Rural Centers and Community Regions that are in aglands. Study the feasibility of expanding uses for lodging on Highway 50. Research Tourist Recreational (TR) land use designations to identify parcels that could increase opportunities for transitory stays.¹⁹
Land Conservation Strategies	• The County should leverage partnerships with El Dorado Resource Conservation District and Georgetown Divide Resource Conservation District to advise and assist landowners with planning and implementation strategies for crucial land conservation practices.
Support for Young Farmers	 Create or explore incentives for younger farmers who want to lease ag land. Create a fund to enable land access for young farmers.

¹⁸ https://www.edcgov.us/Government/ag/documents/Ranch%20Marketing%20Ordinance.pdf

¹⁰



TRANSPORTATION & BROADBAND Infrastructure

El Dorado's transportation system is mainly focused on its roadway network due to the county's low-density development, which has resulted in travel primarily in single-occupancy automobiles. The low-density development has limited facilities that can support active transportation, but the county's roadways do provide a travel network for freight trucks, buses, pedestrians, bicyclists, and equestrians. The county's roadways are mostly rural, but are quickly urbanizing especially in the western part where the county borders Sacramento County. U.S. Highway 50 is the main transportation corridor, extending west to east through the county, providing access to key population centers including El Dorado Hills, Cameron Park, Diamond Springs, Placerville, Camino, and South Lake Tahoe. U.S. 50 along with other state highways including Highway 49, county arterial roads and other public and private roads serve as access points to properties, recreation and agritourism.

Agritourism faces several transportation-related challenges. Most in-county travel is day trips for recreational activities such as Apple Hill, farm trails and winery visits because there is a lack of lodging options. Traffic congestion especially along Highway 50 is a major challenge, especially during peak tourism season. More lodging and accommodation options would support

agritourism and recreational activities, alleviating traffic congestion. Ride-share services are limited, which impacts agritourism and economic development as well as agricultural operations. A previous shuttle pilot in Apple Hill for day trips was not successful, although there is a "Stay and Play" shuttle funded by the El Dorado County Air Quality Management District. The El Dorado County Visitors Authority designed the program to encourage group transportation and overnight stays in the county, reduce vehicle congestion, and introduce new visitors to the area.

Transportation is also problematic in the South County area where the wineries are located. The County's aim to expand a multi-use trail network in South County would support direct-to-consumer farms and facilities, increase agritourism, and help with traffic congestion on main roads. New infrastructure mandates, such as Electrical Vehicle (EV) mandates, are especially challenging for wineries, as the infrastructure is costly and approval from utility providers can be timeconsuming. Bay Area tourists, in particular, could patronize other wineries that already have EV charging and sufficient lodging accommodations, such as Lodi or Napa. There is funding available to help farms and wineries with EV infrastructure, but it may not be adequate to meet the overall agritourism needs.

The county's Pavement Condition Index (PCI) score in 2020 was 63, which means the road conditions are deteriorating at an increasing pace and are at risk of failing. The county's roads are particularly susceptible to flooding, erosion, and mudslides during rain events, closing roads and highways. Wildfires, such as the 2021 Caldor fire, also pose a challenge, as emergency vehicles need access to rural roadways while residents and visitors need quick access for safe evacuations. Funding limitations for capital projects such as road maintenance and rehabilitation are a major county and regional issue.

The county's topography and low-density population have resulted in inadequate broadband across the county, with the rural areas disproportionately affected by the lack of broadband infrastructure and affordable access. Over eight years ago El Dorado County recognized that improved broadband service fit strongly within the County's Economic Development Strategic Plan. Since then, the County has had a proactive strategy to address this major infrastructure gap. In 2017, El Dorado County started working with NEO Connect - a Colorado-based consulting firm specializing in broadband planning and analysis - to complete the 2019 Broadband Strategic Plan. This plan provided several options to improve broadband, including targeting priority areas, grant funding, and publicprivate partnerships for implementation.

In 2022, the County conducted a county-wide initiative for all residents and business owners to self-report internet speeds at work, home and places where they are connected to the internet. The El Dorado County Speed Test Campaign helped identify areas where homes and businesses do not have broadband service. The County developed a priority areas map to direct funding for broadband.

El Dorado County has worked to address each of the identified options and has been awarded several grants resulting in over four and a half million dollars going towards broadband infrastructure in nearly half of the top priority underserved and unserved communities. El Dorado County has also started work on a programmatic Environmental Impact Report for the entire county and has earmarked five million dollars in American Rescue Plan funds to design and engineer broadband networks. In 2023, the County was awarded \$500,000 from the California Public Utilities Commission's (CPUC) Local Area Technical Assistance (LATA) program for further design and engineering work. Additionally, the County is currently awaiting the results of an application for the CPUC's Last Mile Federal Funding Account, which will allocate more than one hundred million dollars for projects in the county.



Current broadband infrastructure does not fully support the demands of farm operations and agribusinesses such as wineries and other agritourism. There are e-commerce technologies that would benefit the range of businesses in rural areas if broadband speeds and connectivity were improved. The county's terrain, including mountains and forestlands, presents many

challenges to deploying fiber infrastructure. While some cell towers are being constructed in Apple Hill, which is a priority area, there is limited activity in South County. Many residents have line-of-sight internet which is a continual challenge, especially as regulatory reporting requirements for agriculture-related activities necessitate high-speed broadband access.

Transportation Recommendations for El Dorado County

CATEGORY	RECOMMENDATION
Feasibility Study	 Research potential locations for EV charging stations off primary corridors.
Road Hardening	 To prevent erosion and to improve road conditions during high rain events, the County should work with SACOG and EDCTC to pursue funding to construct diversion ditches and use water bars in high-traffic service roads that are adjacent to irrigated agricultural operations. Other methods to prevent erosion in areas that serve agriculture operations include planting vegetation/cover crops and applying gravel.
Trail Expansion and Improvements	• SACOG and EDCTC should work with nonprofits, tourism organizations, and County government to extend the El Dorado Trail so that it connects to Sacramento's American River Parkway trails. The El Dorado Trail runs more than 35 miles from Camino west to the line between El Dorado and Sacramento counties, just south of Folsom. An expansion would improve pedestrian and bicycle access for agritourism. Trail improvements and expansions should also be pursued, and should consider ride share opportunities.

Broadband Recommendations for El Dorado County

CATEGORY	RECOMMENDATION
Partnerships to Accelerate Broadband Infrastructure Deployment	 SACOG, EDCTC, and the County should partner on joint use dig once/dig smart opportunities for broadband and transportation projects, including California's Middle-Mile Open Access broadband network, which includes roadways in El Dorado County.²⁰ ²¹



FOOD SYSTEM AND

Governance

Except for wine grapes, 90% of the sales on farms in El Dorado county are through direct marketing, either at on-site ranch marketing shops or farmer's markets. ²² There is an opportunity to increase access to new markets for the county's growers and food producers through efforts such as Farm to School and other avenues for institutional procurement, both in the county and the region. At present, the county has limited infrastructure such as aggregation facilities and food hubs that would help growers reach expanded markets. In addition to aggregation facilities, the county needs additional cold storage facilities for wine products and other produce.

There is an opportunity to increase sales and expand market opportunities for farmers, ranchers, and food producers through efforts such as farm-to-school and other institutional procurement markets. To get more youth involved

in and aware of agriculture, El Dorado has established Ag in the Classroom. The program reaches more than 2,500 students in the county each year. The El Dorado Water Agency is one of the sponsors for the program and has contributed to Ag in the Classroom's irrigation and watershed educational offerings, which teach students about water and its importance to local agriculture, the environment, and the local economy.

Similar to other counties in the region, El Dorado County needs a livestock processing facility. There is an effort supported by the University of California Cooperative Extension (UCCE) in partnership with four counties - Calaveras, Amador, Tuolumne, and El Dorado - to establish a co-op USDA facility with the capacity to process 5,400 lbs. a day. A USDA facility is often cost and time-prohibitive, so a co-op model is preferred to help offset the cost.







Food System and Governance Infrastructure Recommendations for El Dorado County

CATEGORY	RECOMMENDATION
Expand Agritourism Opportunities	• The County should support the ability to expand agritourism activities for its family farms, especially farms that sell directly to consumers. Some of the activities could include adding events at the farm, farm stays, and other outdoor recreational activities, such as hiking and fishing.
Institutional Procurement Strategy	 The County should explore an institutional procurement strategy to expand market opportunities for farmers, ranchers, and food producers.
Improved Governance of Water Resources	 There is a fragmentation of water infrastructure delivery and supply. Exploring a way to improve the governance of water resources would support the service, water reliability, and resilience of the water system for agricultural users.
Tourism Business Improvement Districts (TBIDs)	• The County should collaborate with the industry to explore the process for setting up a TBID which would provide revenues for both the County and the agricultural industry, especially wineries, to support agri-tourism related infrastructure development.







