

Yuma County, AZ

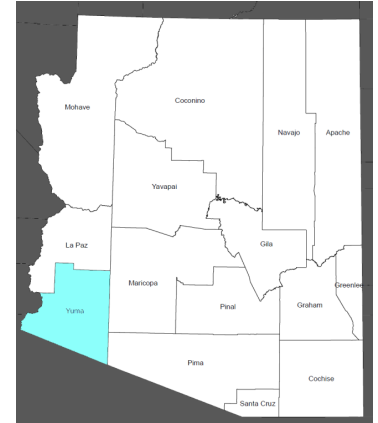
Arizona County Agricultural Economy Profiles University of Arizona Cooperative Extension

Overview

Yuma County is located at the southwest corner of Arizona and is bordered to the west by California and the Colorado River, to the north by La Paz County, and to the east by Maricopa and Pima counties. The county is the fifth most populous county in the state, with more than 90% of the population living in urban areas, such as the city of Yuma.

Top industries in Yuma County include agriculture, tourism, and government. Yuma is a popular destination for seasonal visitors because of its mild winter temperatures and the county is home to two military bases.

Despite having a small share (7%) of county land in farms, agriculture plays an important role in the Yuma County economy. In fact, on-farm agriculture accounts for more than 14% of the county's GDP and employs nearly one-fourth of all private industry jobs. Yuma County accounts for about 30% of Arizona's total agricultural cash receipts.



Map of Yuma County, Arizona

Indicator	Yuma County	Arizona
Land Area (square miles)	5,519	113,990
Land in Farms (Crops, Grazing) (square miles)	386	40,822
Population (2018)	212,128	7,171,646
Annual Average Population Growth Rate (2010-18)	0.9%	1.4%
Percent of Population Over 65 (2018)	18.8%	17.5%
Percent Population Rural (2010)	10.4%	10.2%
Total Employment (2018)	67,639	2,826,095
Share Federal, State, & Local Government Employment (2018)	21.0%	13.8%
GDP (2018)	\$8.3 billion	\$348.3 billion
Ag, Forestry, & Hunting GDP (on-farm only) (2018)	\$1.2 billion*	\$2.3 billion

* Estimated from 2017 IMPLAN model data

Industry	Location Quotient
Crop harvesting, primarily by machine	121.07
Other vegetable and melon farming	80.09
Farm labor contractors and crew leaders	69.09
Other postharvest crop activities	46.89
Recreational vehicle dealers	29.31
All other miscellaneous crop farming	26.24
Hay farming	24.54
Soil preparation, planting, and cultivating	21.08
Cotton farming	18.96
Rv parks and campgrounds	16.23

Top 10 Private Industries in Yuma County by Employment LQ, 2018

An economy can be characterized by the industries that make up the “base” of the economy. A common way to do this is with location quotients (LQs). LQs are the ratio of a particular industry's share of employment within a region to the same industry's share of national employment. An industry with a LQ greater than 1.25 is considered part of the economic base, exporting goods and services and bringing money into the region. LQs also help identify a region's areas of specialization. Higher LQs indicate greater specialization. Of the top 10 most concentrated private industries in Yuma County, eight are agricultural industries, reflecting not only employment on-farm, but also industries that prepare the land and are involved in harvest and postharvest activities. For example, the share of employment in crop harvesting in Yuma County is 121.07 times the national average.

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Every 5 years, U.S. Department of Agriculture releases the Census of Agriculture, which provides the most comprehensive source of information on agricultural production by county. The Census provides information on the number of farms, types of crops and livestock produced, and farm characteristics, among other information. A farm is defined as any establishment that produced and sold, or could have sold, more than \$1,000 or more of agricultural products in the Census year. The following information comes from the most recent 2017 Census of Agriculture.

Farms

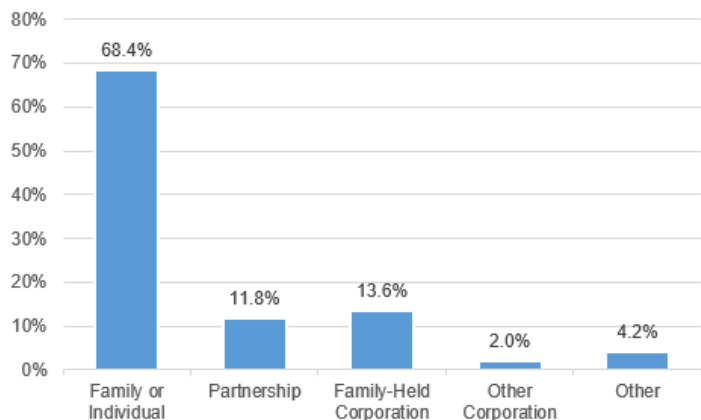
There were 456 farms in Yuma County in 2017, covering 193,823 acres of cropland (94% irrigated). The average farm size was 542 acres, larger than the national average of 441 acres, with the top 9% of farms accounting for 71% of county acreage.

Of 456 total farms, 113 had less than \$1,000 in sales and 98 farms had more than \$500,000 in sales, evidence of the concentration of large, high-value crop-producing farms in the county. The majority of county farms in Yuma County are family- or individually-held (68%), 14% are family-held corporations, and 12% are partnerships.

Farms are classified by the type of agricultural products they produce. When a farm or ranch produces more than one agricultural product, they are classified by the product that constitutes more than 50% of their sales. The most common type of operation in Yuma County are farms producing fruit and tree nuts (123 farms), followed by hay and other crop farming (117 farms), and vegetable and melon farming (64 farms).

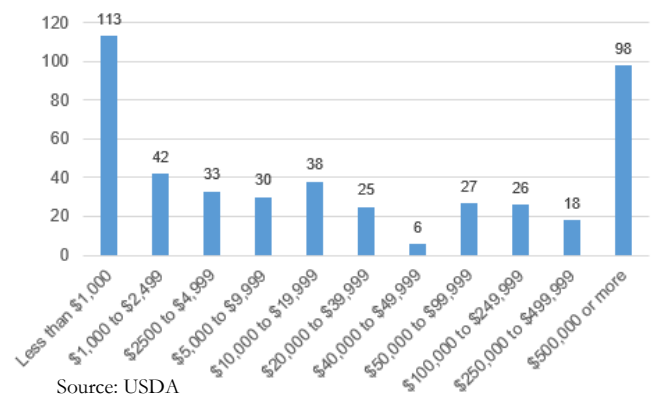
While the number of farms is helpful in understanding how many farms “specialize” in different types of agricultural production, it does not reflect the magnitude or scale of production by commodity, which is better captured by sales or cash receipts (next page).

Yuma County Farms by Legal Organization, 2017



Source: USDA

Yuma County Farms by Annual Sales, 2017



Source: USDA

Yuma County Farms by Industry

Category	Farms
<i>Total farms</i>	456
Oilseed and grain farming	16
Vegetable and melon farming	64
Fruit and tree nut farming	123
Greenhouse, nursery, and floriculture production	7
Other crop farming	135
Cotton farming	18
Hay and all other crop farming	117
Beef cattle ranching and farming	23
Cattle feedlots	4
Dairy cattle and milk production	2
Hog and pig farming	6
Poultry and egg production	4
Sheep and goat farming	11
Aquaculture and other animal production*	61

* Includes farms where no single type of livestock accounts for more than 50% of farm sales.

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Production & Marketing

Yuma County is a crop-dominant county, with an estimated 81% of county cash receipts originating from sales of crops. According to the 2017 Census of Agriculture, sales of **vegetables, melons, potatoes, and sweet potatoes** (\$782.3 million) dominate, ranking Yuma County as the third-largest vegetable and melon producing county in the U.S. **Grains, oilseeds, dry beans, dry peas**, particularly wheat, are commonly grown as rotational crops, generating \$32.6 million in sales. Other major agricultural products include **fruit, tree nuts, and berries** (\$62.5 million) and **other crops and hay** (\$50.2 million). Sales for **cattle and calves** are not disclosed for Yuma County, but the county is the second largest producer in the state by sales. Local marketing represents roughly 7% of county cash receipts, significantly higher than the national average of less than 1%. Additionally, there were 31 farms with reported sales of organic production.

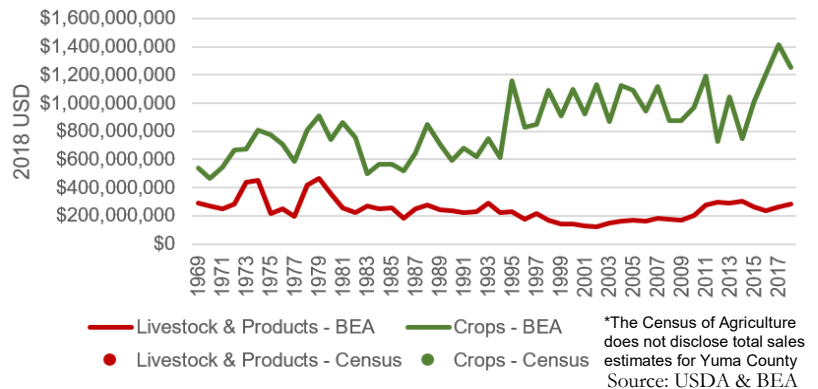
Tribal Agriculture

Highly productive farms operate on tribal land in Yuma County, many of which grow a vegetable-wheat rotation. The Fort-Yuma-Quechan reservation, located primarily in California but spanning into Yuma County, had 10 farms that generated over \$208 million in sales. Most irrigated agriculture falls on the California side of the reservation, therefore production occurring within Yuma County is only a portion of the total. The Cocopah reservation falls entirely within Yuma County. Agricultural sales figures are not disclosed, but total production expenses were nearly \$108 million for the six farms operating on the land. Therefore, we might expect total sales equal or greater to total expenses, exceeding \$108 million. Most agricultural land within the Cocopah reservation is leased to non-Indian farmers.

Leafy Greens

With its arable land, warm winter temperatures, and access to Colorado River water for irrigation, Yuma County is one of the nation's largest producers of winter vegetables, particularly leafy greens such as Romaine, iceberg, and red leaf and green leaf lettuce. Production of leafy greens rotates seasonally between the Yuma area in the winter and central California in the summer, jointly fulfilling a large majority of national supply. During peak weeks in December, leafy greens from Yuma can represent between 80% to 95% of U.S. weekly shipments.

Yuma County Agricultural Cash Receipts for Crops & Livestock, 1969 to 2018

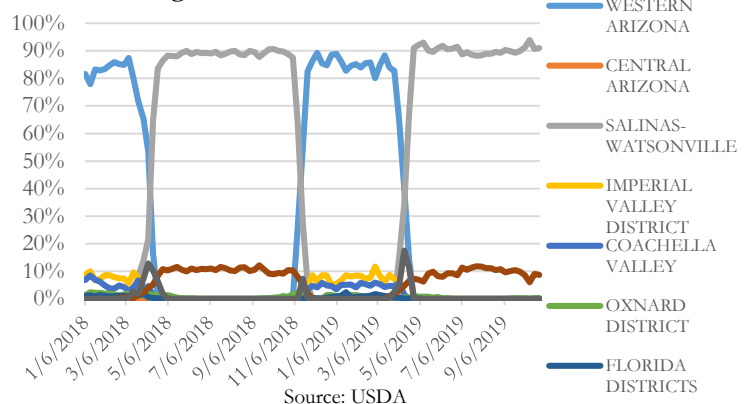


Yuma County Tribal Agriculture Summary and Map

	Cocopah	Fort Yuma-Quechan
Farms	6	10
Total cropland acres	29,136	45,643
Durum wheat for grain (acres)	9,958	10,180
Land in vegetables (acres)	(D)	19,973
Value of ag. products sold (\$1,000)	(D)	208,144

(D) = Not disclosed

Share of National Weekly Romaine Lettuce Shipments by Production Region, 2018-2019



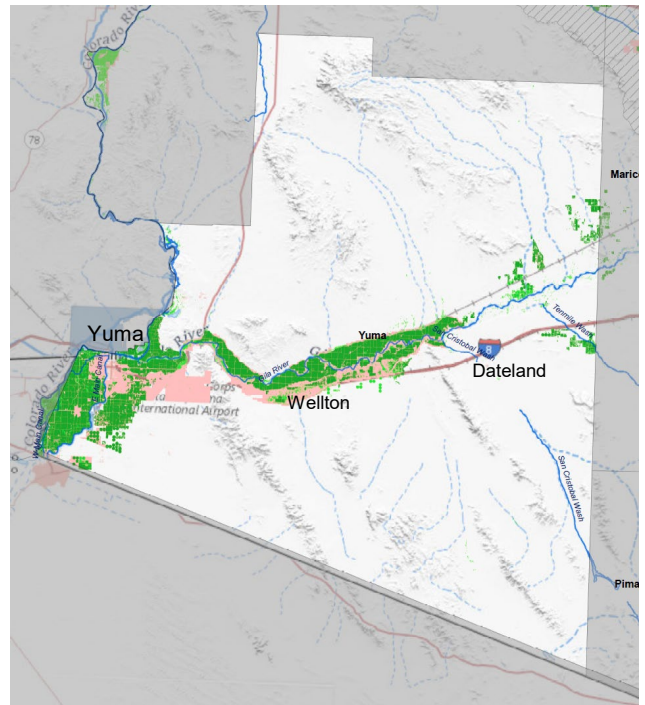
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Irrigation Water Use

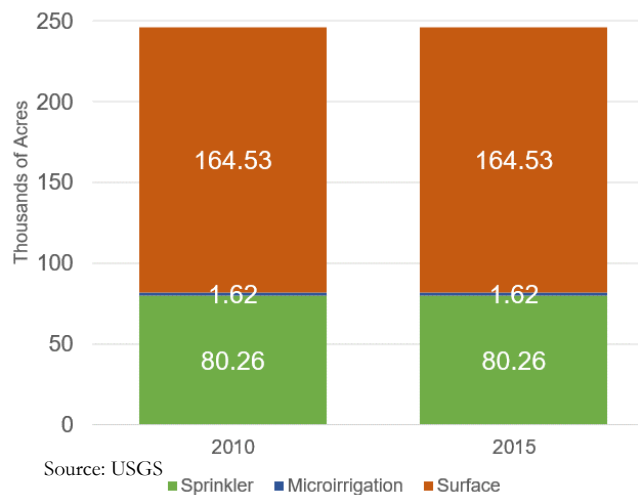
In Arizona, agriculture accounts for about 75% of the state's water use. More than half of withdrawals for agricultural uses in the state are from surface water. In some areas of the state with high water demand, groundwater withdrawals for irrigated agriculture are limited by the 1980 Groundwater Management Act. This legislation established five Active Management Areas (AMA) as well as other Irrigation Non-Expansion Areas (INA) where groundwater pumping and expansion of irrigated agriculture are limited. There is no land in Yuma County within an AMA or INA.

Based on 2015 USGS estimates of water use, agriculture accounted for 96.2% of Yuma County water withdrawals. Withdrawals for agriculture in Yuma County are dominated by crop production, with the large majority of irrigation water sourced from surface water. In 2015, an estimated 1,084,143 acre-feet (AF) was sourced from surface water and 123,966 AF was sourced from groundwater. An acre-foot is the amount of water required to cover one acre one foot deep in water. Irrigated crop production is concentrated along the Gila River, extending to its confluence with the Colorado River, and southward toward the Colorado River Delta. Irrigation water use remained relatively steady between 2010 and 2015, as did the share of acreage irrigated with gravity-flow, sprinkler, and microirrigation.

Yuma County Water Map



Yuma County Irrigated Acres by Irrigation Technology



Yuma County Agricultural Water Use by Use and Source

