

3.7 Land Use and Demographics

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City of Ventura's Westside



3.7 Land Use and Demographics

3.7.1 Political Boundaries and Communities

The Ventura River watershed is located in southern California, in western Ventura County, with a small section in the northwest corner located in eastern Santa Barbara County.

Much of the watershed is rural and undeveloped. Urbanized areas are found on the valley floors in the middle and lower half of the watershed; the upper half is in the Los Padres National Forest.

Cities comprise only 3.17% of the watershed (1.24% City of Ventura; 1.93% City of Ojai). The City of Ojai lies entirely within the watershed and 13% of the City of Ventura lies within the watershed. The rest of the watershed is in unincorporated Ventura County.

Unincorporated communities include Meiners Oaks, Mira Monte, Oak View, Live Oak Acres, Casitas Springs, Matilija Canyon, and part of Upper Ojai. The watershed's most densely urbanized area is in the City of Ventura near the coast, an area known as the Westside or colloquially as "the Avenue." The Westside has an active community council working to improve the quality of life on the Westside.

*Cities comprise only
3.17% of the watershed.*

Westside Community
Council Logo



Two small coastal watersheds—the North Ventura Coastal Streams watershed and the Buenaventura watershed—flank the Ventura River watershed's lower section. Water from the Ventura River watershed supplies users in both of these coastal watersheds (see Figure 3.7.1.2).

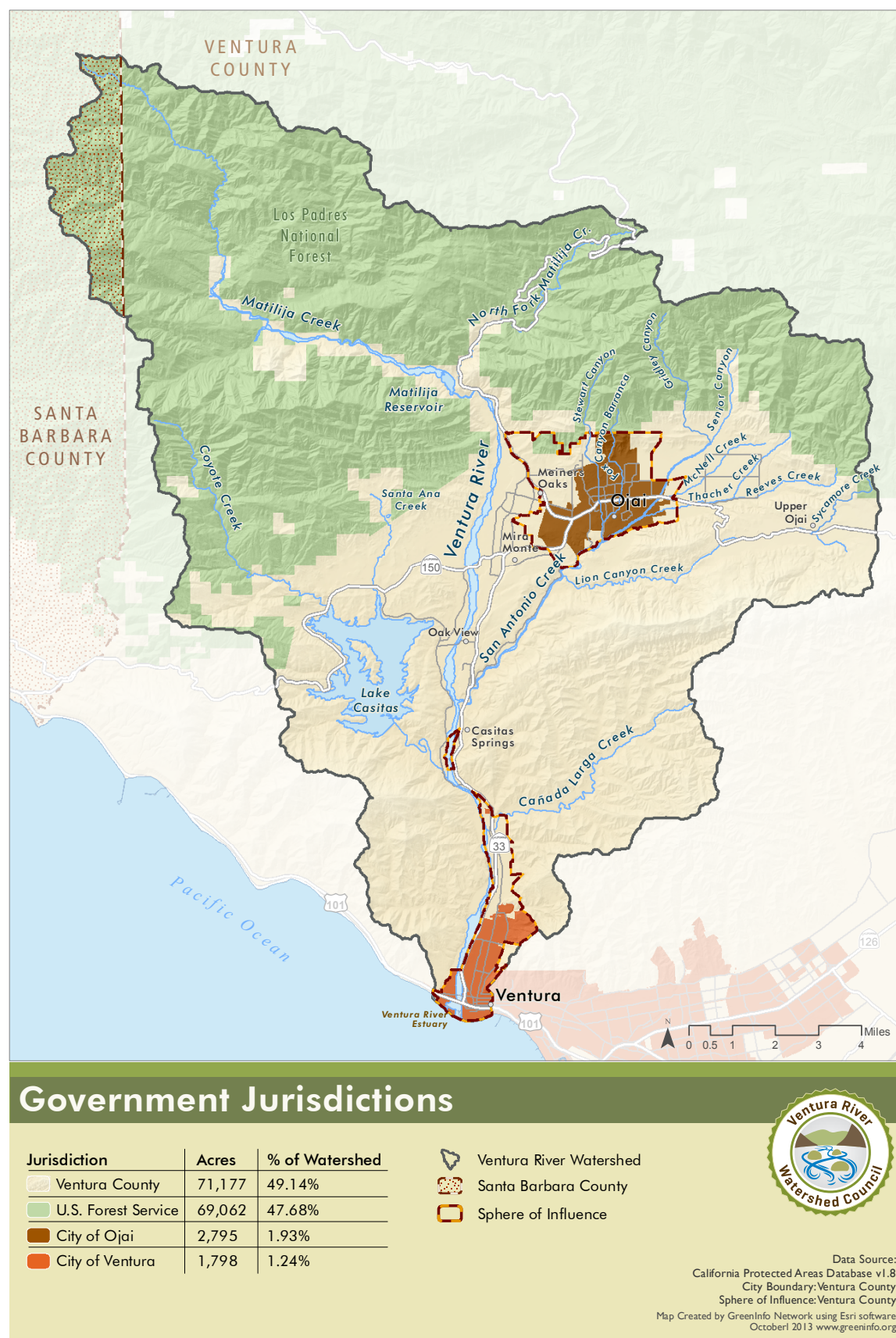


Figure 3.7.1.1 Government Jurisdictions Map



Figure 3.7.1.2 Ventura River Watershed Location Map

From a watershed management point of view, human and socioeconomic dimensions are no less important to understand and consider than physical characteristics.

3.7.2 Demographics

This section provides a summary of population, income, employment, and other basic demographic data. Demographic data describe population characteristics, which are different from one watershed to the next. From a watershed management point of view, human and socioeconomic dimensions are no less important to understand and consider than physical characteristics. For example, the demographics of an area can influence water demands as well as the types of water demand management activities that may be most effective.

Demographic data are generally collected for cities, counties, or Census tracts, not watersheds; therefore the data herein are limited and by necessity based upon compilations and estimates.

3.7.2.1 Population

The Ventura River watershed's population is relatively small and slow growing. As of the 2010 Census, the estimated population was about 44,140, including 22,943 people residing in County of Ventura

unincorporated areas, 13,736 people in the City of Ventura, and 7,461 in the City of Ojai. The population is 58% white, 37% Hispanic or Latino, 2% Asian, and 3% other races. The City of Ventura’s Westside is the area with the most Spanish-speaking households.

Ventura Avenue, City of Ventura’s Westside. The City of Ventura’s Westside is the area with the most Spanish-speaking households.
Photo courtesy of BebbberBlock.org



Between 2000 and 2014, the population decreased in the City of Ojai by 3.4%, increased in the City of Ventura by 8.0%, and increased in unincorporated Ventura County by 4.5%. (The last two figures do not necessarily reflect growth within the watershed, however.)

Between 2003 and 2012, the number of new residential customers increased by 23 for Casitas Municipal Water District, by 634 for the City of Ventura (citywide), and decreased by one for Golden State Water, which primarily serves the City of Ojai. Between 2000 and 2012, total K-12 public school enrollment for schools within the watershed decreased by 1,149, or 28%. The decrease in the City of Ojai was 53.6% percent.

See “Population Projections” in “3.4.3 Water Demands” for more information on population growth trends.

Table 3.7.2.1.1 Population

Watershed Total	44,140
City of Ojai	7,461
City of Ventura (within watershed)	13,736
Unincorporated Ventura County	22,943

Population estimated with a GIS tool using Census Block Groups (except for City of Ojai, which is direct from the 2010 Census).

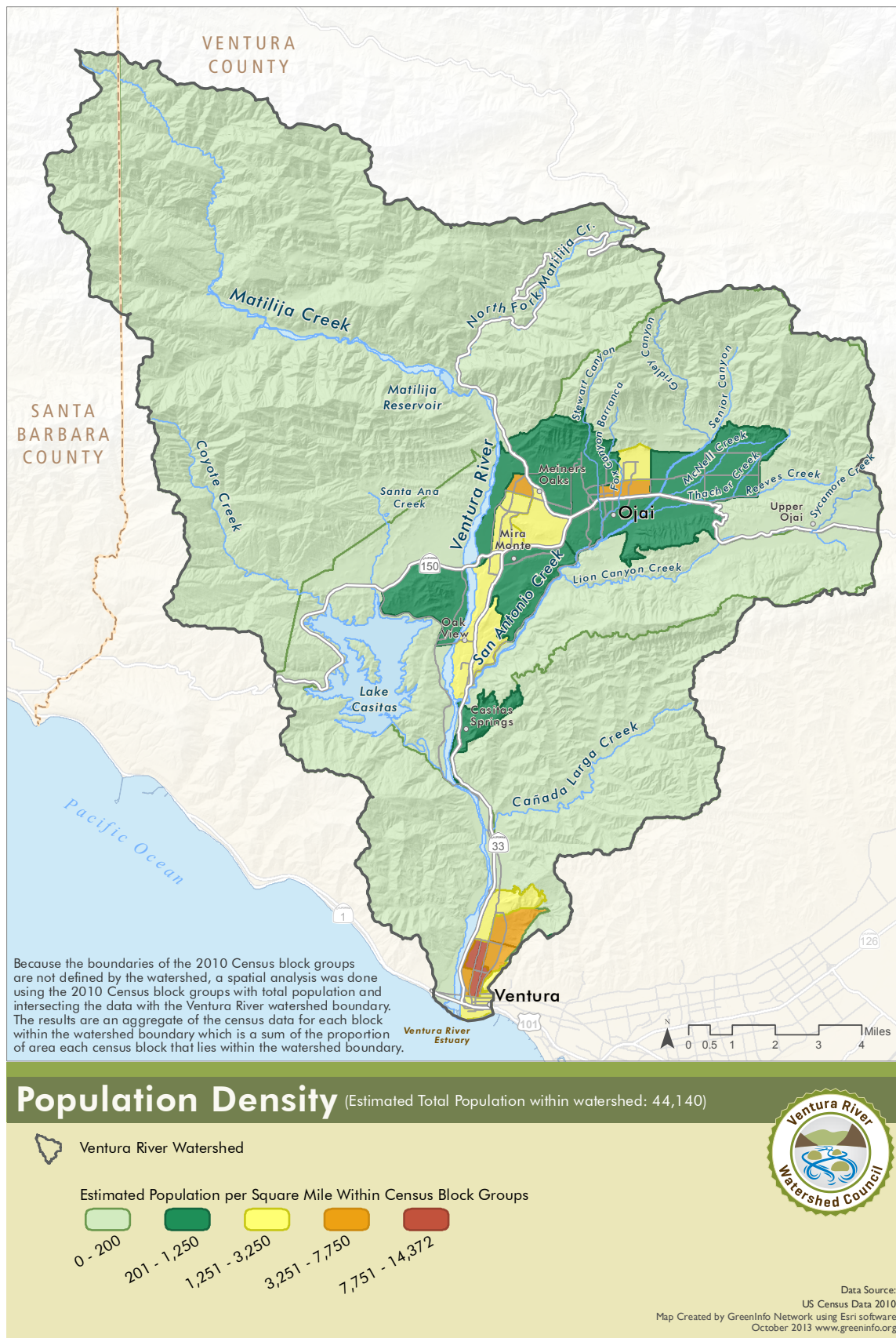


Figure 3.7.2.1.1 Population Density Map



Figure 3.7.2.1.2 Spanish Speaking Households Map

3.7.2.2 Employment and Income

Employment opportunities are diverse in the watershed. Leisure and hospitality jobs, which rely on the watershed's natural beauty and recreational assets to attract visitors, dominate the employment landscape.

The four largest job sectors according to a Southern California Association of Government (SCAG) assessment are leisure and hospitality (art/entertainment) (3,860 jobs in 2012); education and health services (3,750 jobs in 2012); professional and business services jobs (1,493 jobs in 2012); and retail trade jobs (1,323 jobs in 2012). The watershed supported an estimated 15,681 jobs in 2012 (SCAG 2014). Note: the jobs provided by key watershed industries, such as agriculture and oil recovery, are sometimes provided by support services that come from outside the watershed or that fall into a different job category; therefore these jobs are not accurately reflected in these SCAG data.

The watershed is home to a number of large private and public schools, a hospital, and several retirement and assisted living facilities.

There is a wide range of incomes, and several areas qualify as disadvantaged or severely disadvantaged communities. The average household income in 2012 was \$48,423. 30.5% of the households earn less than \$25,000. 12.5% earn greater than \$100,000. In the city of Ojai, the 2012 median household income was \$64,217, and 2% of the population earn more than \$500,000 annually (see Figure 3.7.2.2.1).

The Westside area of the City of Ventura qualifies as a disadvantaged community (with median household incomes below 80% of the state average, or \$48,706). The Ventura River watershed coastal area within the City of Ventura qualifies as a severely disadvantaged community (with median household incomes below 60% of the state average, or \$36,979).

Leisure and hospitality jobs, which rely on the watershed's natural beauty and recreational assets to attract visitors, dominate the employment landscape.

Table 3.7.2.2.1 Watershed Income Data, 2008 and 2012

	2008	2012
Average (weighted) Household Income	\$48,387	\$48,423
% of Household by Income		
Below 25k	31.1%	30.5%
25k–50k	28.4%	28.5%
50k–100k	28.2%	28.5%
100k+	12.3%	12.5%

Source: Southern California Association of Governments (SCAG 2014)

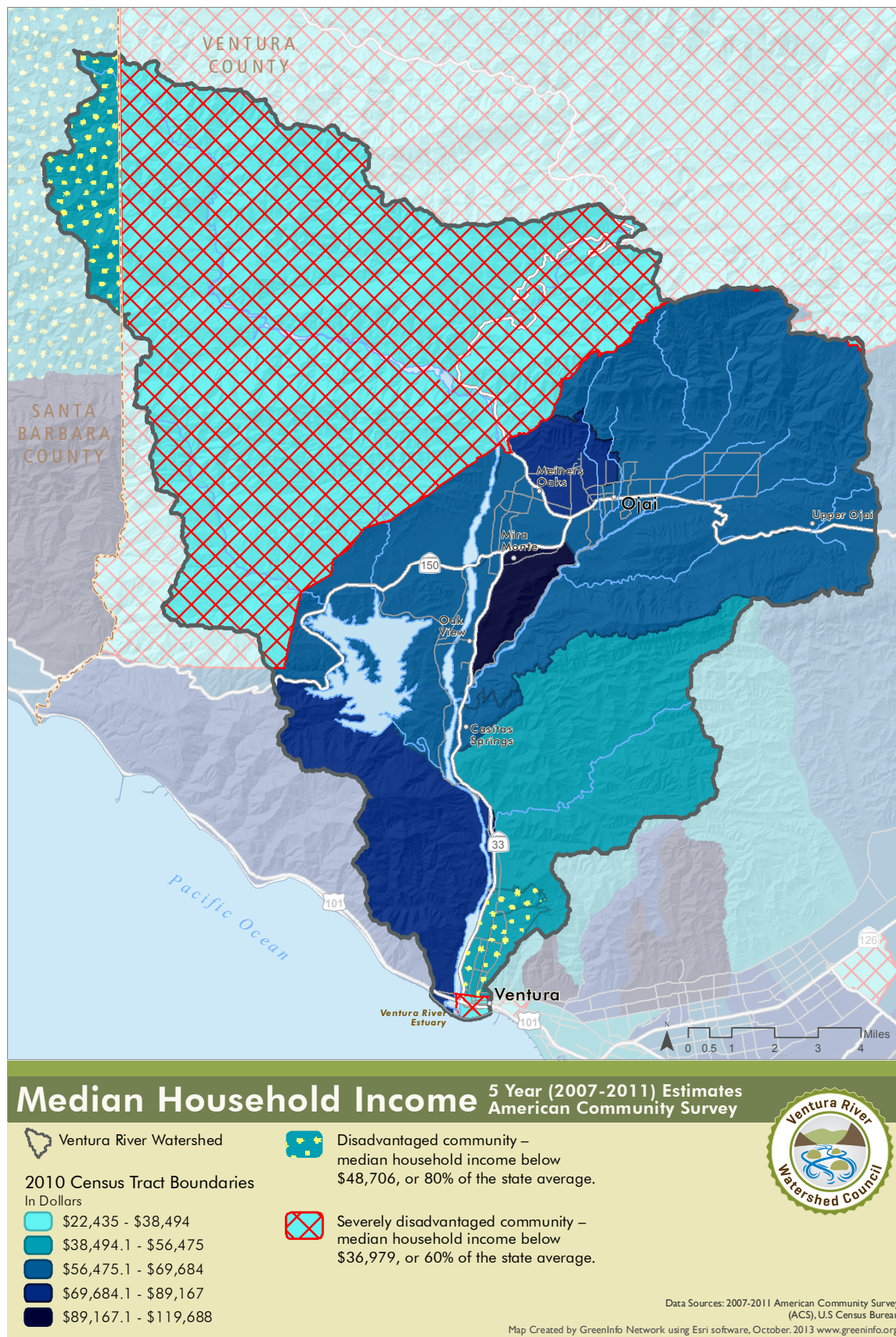


Figure 3.7.2.2.1 Median Household Income Map

Note: The northwest corner of the watershed is an unpopulated area that is part of a larger Census Tract in Santa Barbara County.

Table 3.7.2.2.2 Jobs by Sector in the Watershed, 2012

	# of Jobs
Total Jobs:	15,681
Leisure and Hospitality (Art/Entertainment) jobs	3,860
Education and Health Services jobs	3,750
Professional and Business Services jobs	1,493
Retail Trade jobs	1,323
Construction jobs	1,179
Manufacturing jobs	895
Financial Activity jobs	784
Other Services jobs	537
Agriculture	438
Wholesale Trade jobs	360
Public/Administration jobs	301
Mining	275
Transportation, Warehousing and Utility jobs	269
Information jobs	217

Source: SCAG 2014

Note: In this analysis, jobs are considered to be in the watershed based on the physical location of the company. If a person works in the watershed, but is paid by a company based elsewhere, that job is not reflected in these data.

3.7.2.3 Housing

Housing in the watershed is provided predominantly by single-family homes. There were 27,710 occupied single-family dwellings in 2012; 2,967 occupied multi-family homes; 1,124 occupied mobile homes; and 49 occupied RVs/vans/boats. 60% of residents are homeowners and 40% are renters. 60% of the housing stock in the City of Ojai was built before 1970 (SCAG 2014). Over half of the housing stock, 58.3%, was built before 1970. A wide range of housing types and prices exists in the watershed, including areas of very large and expensive estates.

Table 3.7.2.3.1 Housing Data, 2008 and 2012

	2008	2012
Percentage of Renters v. Homeowners		
Owner	59.8%	60.2%
Renter	40.2%	39.8%
Single-family v. Multi-family housing permits		
Total	16,177	16,458
Single-family Detached Housing Units (occupied)	11,053	11,252
Single-family Attached Housing Units (occupied)	1,044	1,065
Multi-family/Apartment/Condo Housing Units (occupied)	2,910	2,967
Mobile Home Housing Units (occupied)	1,114	1,124
Boat, RV, Van, etc. (occupied)	55	49

Source: SCAG 2014

Homeless

At the time of the major river bottom cleanup in February 2012, an estimated 100 people were living in the lower Ventura River bottom. City of Ventura staff working on this issue estimated that as of January 2015, there were significantly fewer illegal campers in the Ventura River—perhaps as much as 80% fewer (Brown 2015).

Data from the *Ventura County 2014 Homeless Count and Subpopulation Survey* are summarized in Table 3.7.2.3.2. Only those persons who met the U.S. Housing and Urban Development Department’s (HUD) definition of homelessness were counted. HUD considers a person homeless only when he/she lives: 1) in places not meant for human habitation, such as cars, parks, sidewalks, and abandoned buildings; 2) in an emergency shelter; and 3) in transitional housing including safe havens (VCCEO 2014). Given that counters did not approach people who might be living in cars or tents, it is likely that there is a significant undercount of the homeless population. In addition, with the transient nature of homeless individuals, these counts are only a snapshot in time.

The overall number of homeless individuals counted in 2014 decreased 18% from the count in 2013. The number of homeless counted in 2014 was the lowest since the count’s inception in 2007 (VCCEO 2014).

Table 3.7.2.3.2 Ventura County 2014 Homeless Count Data

City	Adults						Children
	Unsheltered Adults	Chronically Homeless	Male/Female	Seniors (62+)	Mental Illness	Veterans	Unsheltered Children
Ventura ¹	265	47%	65%/31%	11%	30%	12%	19
Ojai	38	50%	87%/13%	13%	19%	16%	1

1. Applies to the entire City of Ventura, not just the part within the watershed.

Data Source: VCCEO 2014

3.7.2.4 Key Data and Information Sources/ Further Reading

Below is a summary of some of key documents that address demographics in the watershed. See “4.3 References” for complete reference citations.

Acronyms

HUD—U.S. Housing and Urban Development Department
SCAG—Southern California Association of Governments

Profile of the City of Ojai (SCAG 2013)
Profile of the City of San Buenaventura (SCAG 2013)
Profile of the Unincorporated Area of Ventura County (SCAG 2013)
Ventura County 2014 Homeless Count and Subpopulation Survey: Final Report. April 2014 (VCCEO 2014)

3.7.3 Land Use

Much of the land in the Ventura River watershed is relatively undeveloped. The northern half (48%) lies within the Los Padres National Forest, and development in the southern half of the watershed has been tempered by traffic, air quality, and land use regulations, and by a scarcity of water.

Developed land uses comprise about 13% of the watershed.

SCAG maintains a land use dataset for areas in southern California. The data, though incomplete, provides a fair estimate of existing land uses. SCAG's 2008 data show that 87% of the watershed's land falls into either the "vacant" or "water" category, which includes the US Forest land, much of the mountains and foothills, along with Lake Casitas and other waterbodies. Developed land uses comprise about 13% of the watershed. Of this 13%, agriculture (excluding grazing lands) makes up about 5%, residential land 4%, oil and mineral extraction 1.5%, and commercial, industrial, and miscellaneous land uses the remaining 2.5%. (Including grazing, agriculture comprises about 18.5% of the land area.)



City of Ventura's Westside. The area of greatest population density in the watershed is in the City of Ventura's Westside.

Much of the watershed's residential area is rural and low density. The area of greatest population density in the City of Ventura's Westside; second is in the City of Ojai and the unincorporated community of Meiners Oaks.

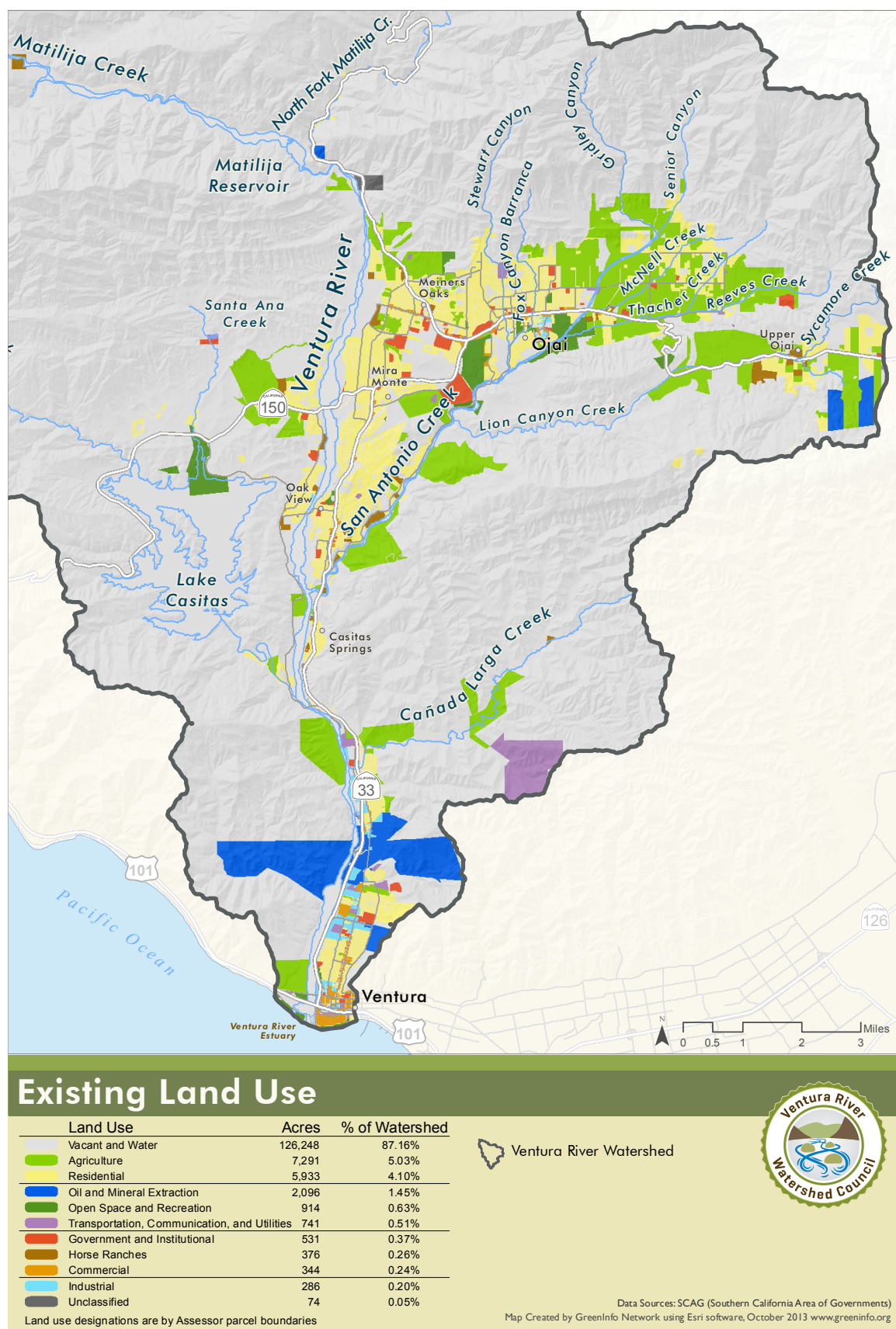


Figure 3.7.3.1 Existing Land Uses Map

Note: Data represented on this map are coarse and provide only a general view. For example, oil extraction fields are known to cover 5,190 acres (DOGGR 1992). Also, grazing lands are not represented as part of agriculture in these data.

3.7.3.1 Agriculture

Ventura County is one of the principal agricultural counties in California, ranking number nine among California counties in total crop value in 2012. The most recent national data put Ventura County at number 10 among all counties in the United States (FBVC 2015).



Orchards, Ojai Valley's East End

Photo courtesy of Michael McFadden

Acreage and Crops

Agriculture is the dominant land use in the watershed and is a critical factor in the management and stewardship of the land and water. Including cattle grazing, 18.5% of the watershed's land area is used for agriculture. As of January 2015, there were approximately 24,400 acres of agricultural land enrolled in the County's Land Conservation Act program (described below) (VCRMA 2015).

Citrus is the dominant crop grown in the watershed, with a history that dates back to the 1870s when orange orchards were first planted (Fry 1983). The Ojai Valley is home to a number of family farms; some have been in operation over 100 years. Citrus, mostly oranges and tangerines, comprises about 43% of the agricultural crop acreage in the watershed. Avocados rank second at 25%. Other crops include grains, row crops, other tree crops, berries, and grapes.

Orange Harvest, Ojai's East End

Photo courtesy of Michael McFadden



Water from the watershed irrigates over 6,000 acres of agricultural land, including some land outside and adjacent to the watershed (in the Rincon area). Figure 3.7.3.1.1 illustrates the areas in the watershed where various crops are grown. See “3.4.3 Water Demands” for information on water use by agriculture.

Even with the relatively recent addition of a couple of large groundwater-dependent agricultural operations (including Taylor Ranch at the bottom of the watershed), the acreage of irrigated agriculture is trending downward. Irrigated agricultural acreage using Casitas water (either in full or supplemental) has gradually dropped from 6,276 acres in 2000 to 5,264 acres in 2013—a reduction of 1,012 acres, or 16%.

Limitations on Mapped Agricultural Data

Current data sources about the types and acreages of crops grown in the watershed are not comprehensive. The two agriculture maps provided in this section provide different looks at farming in the watershed. Figure 3.7.3.1.1, the “Agricultural Crops” map shows data collected by the Ventura County Agricultural Commissioner’s office as part of their permitting process. In part because it is linked to permit activity, which may be infrequent, it is neither comprehensive nor up-to-date; however, it provides an approximation of the crops

grown in the watershed. Figure 3.7.3.1.2, the “Important Farmlands Inventory” shows data from the state’s Farmland Mapping and Monitoring Program, which produces maps and statistical data used for analyzing impacts on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

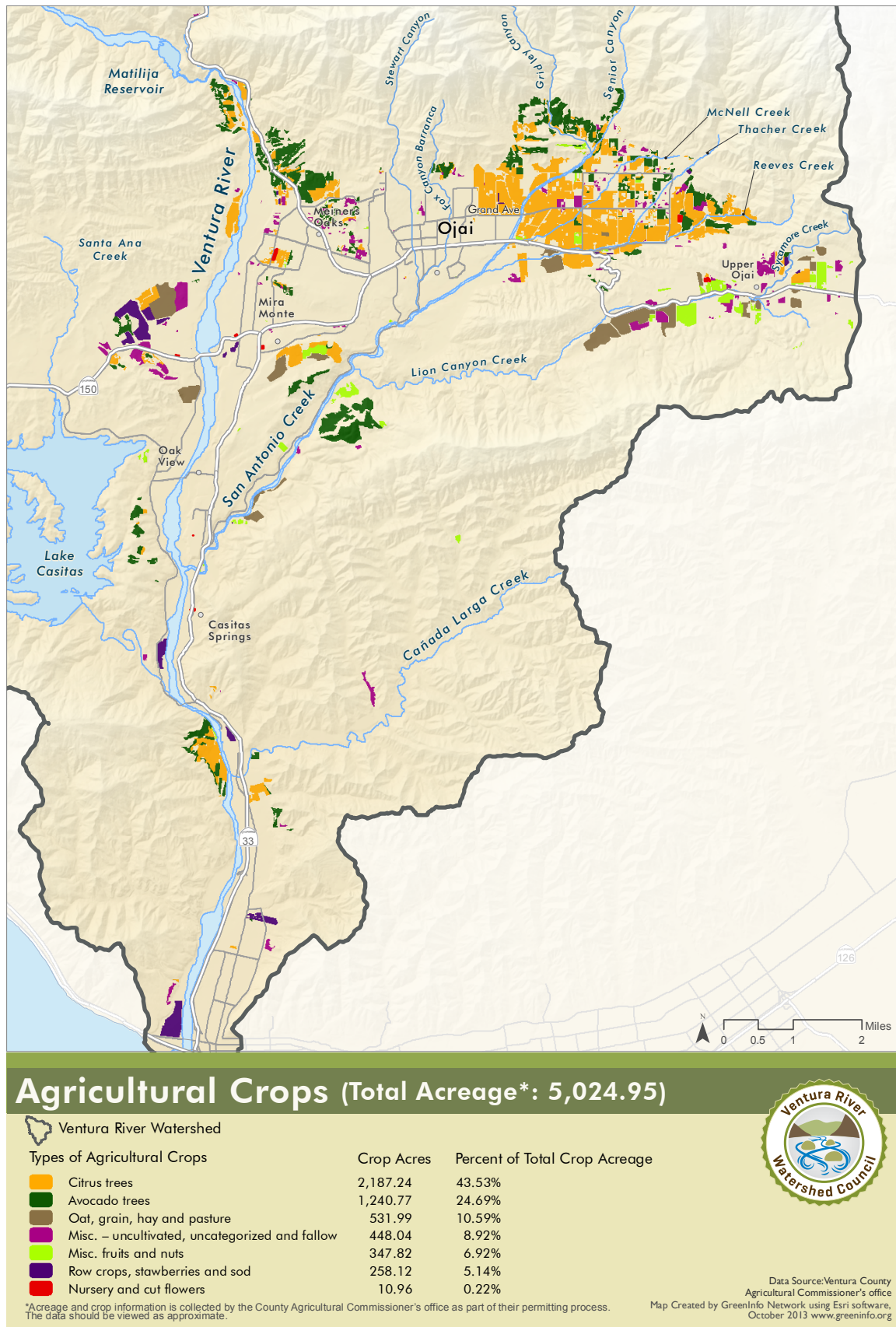


Figure 3.7.3.1.1 Agricultural Crops Map

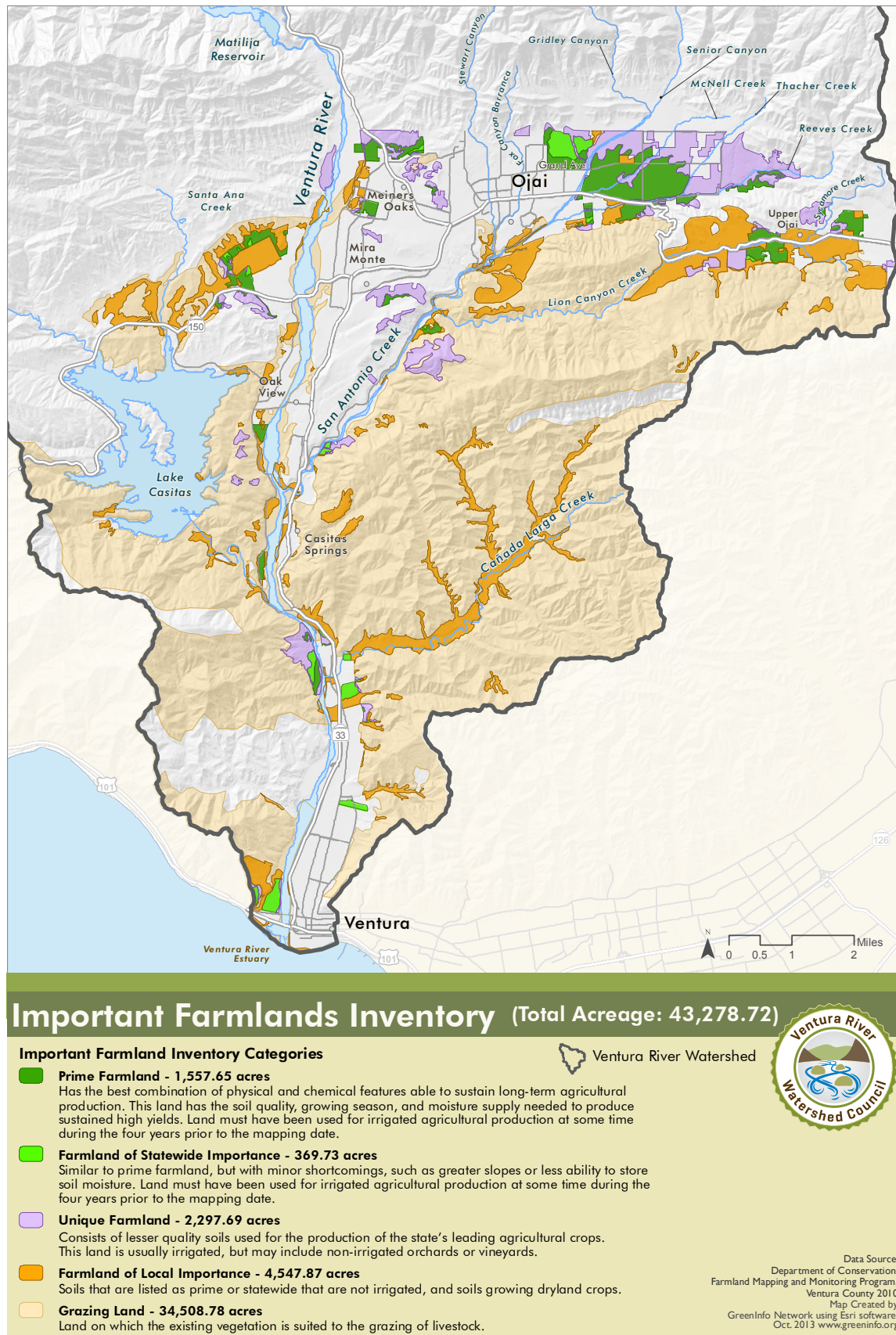
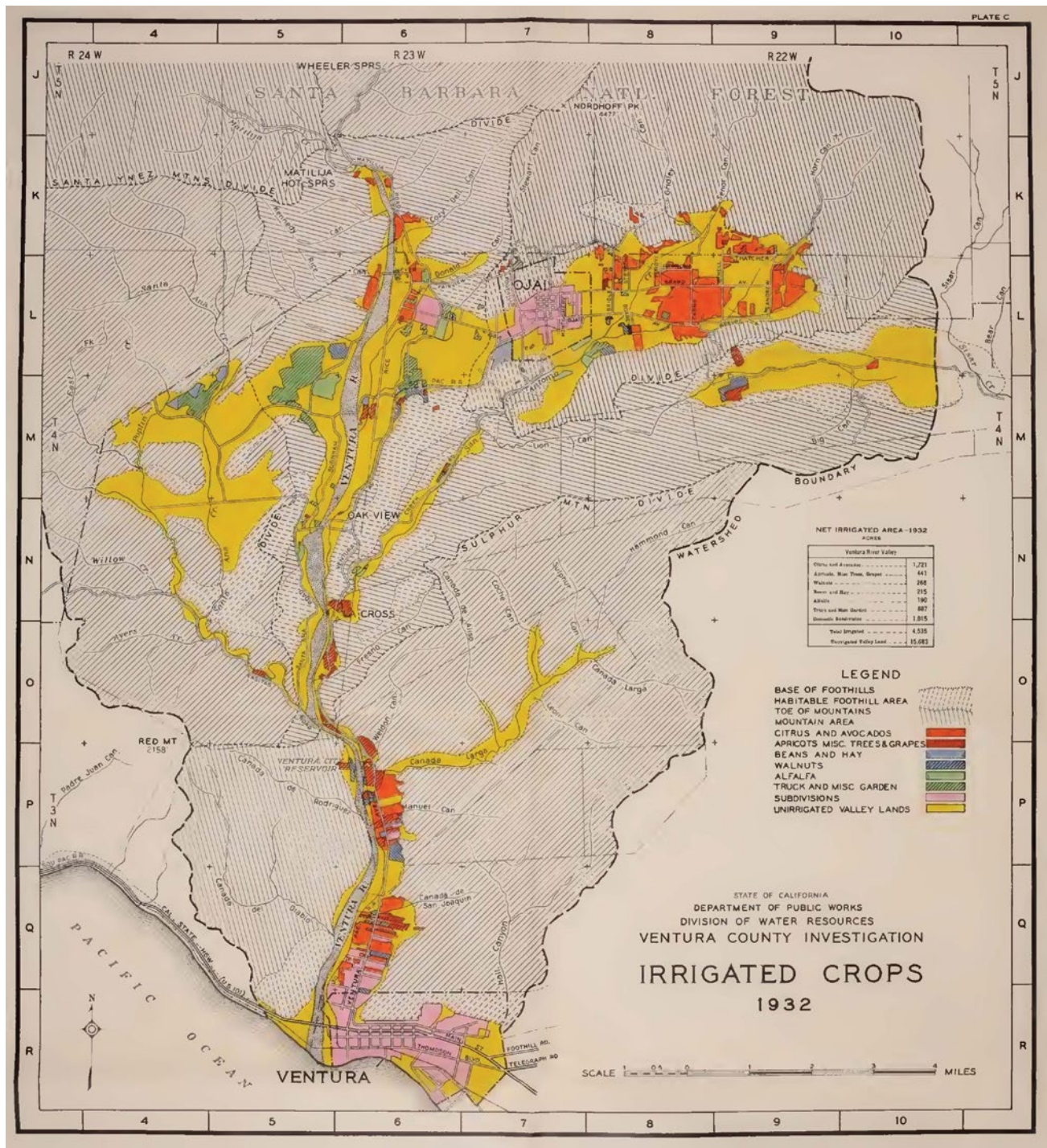


Figure 3.7.3.1.2 Important Farmland Inventory Map



Map of Irrigated Crops, 1932

Source: DWR Bulletin 46 (CDWR 1933)



Hay Harvest, Upper Ojai

Photo Courtesy of Fred Rothenberg



Strawberries, Near Coast

Photo Courtesy of Santa Barbara Channelkeeper

Rincon-Vitova Insectary Beneficial Insect Production Facility on Ventura Avenue. Beneficial insects are being grown on squash.

Photo courtesy of Lisa Brenneis



Integrated Pest Management is used widely by growers in the watershed.

The acreage of certified organic farmland in the watershed is small, however, Integrated Pest Management (IPM) is used widely by growers. IPM is an environmentally sensitive approach to pest management. There are many aspects to IPM, but one of them is the cultivation of beneficial insects—insects that kill pests. Growers practicing IPM minimize the use of pesticides that would harm beneficial insects, and provide the habitat needed for them to thrive. Local insectaries regularly supplement existing populations of beneficial insects to target specific pest outbreaks.

Approximately 21,000 acres of land is used for cattle grazing. The majority of this land is privately held.

During the mid-1800s, the missions were divided into privately owned ranchos. Ventura County contained all or part of 19 ranchos, five of these were in the Ventura River watershed (Rancho Ex-Mission San Buenaventura, Rancho Ojai, Rancho Santa Ana, Rancho Cañada de San Manuelito, and Rancho Cañada Larga o Verde). Of these, only Rancho Cañada Larga is still a working cattle ranch of approximately the same size (about 6,500 acres) as the original land grant.

Cattle and other livestock were prominent throughout the Ventura River watershed through the first half of the 20th century. Taylor Ranch, part of the old Rancho Cañada de San Miguelito on the west side of the Ventura River, operated a 16,000 head feed yard as recently as 1971 (Katz 1987), and a rail yard for shipping cattle existed until the middle of the 20th century at the mouth of Cañada Larga Creek.

There may be close to 1,000 head in the entire watershed in normal years. However, droughts cause a reduction in numbers. A survey conducted by the Ventura County Cattlemen's Association

in 2012, which was the first year of a multi-year drought, reported 612 head on 20,919 acres (Association 2012). After two more consecutive years of drought, cattle numbers are currently likely below 200-300 head.

Operations vary significantly from one ranch to another. Most Ventura River Watershed operations are small, with a majority being cow/calf producers, which maintain their cattle year round. This is done with very low stocking densities to insure adequate forage to last the summer. Some operations also run stockers. These are yearling cattle (6 months to 18 months old) that are brought here in the winter and spring when the grass is good for weight gain. They normally arrive in December or January and stay until June or July depending on rainfall and grass production. Stockers are typically run with higher stocking densities for shorter periods of time.

—Mike Williams, Ventura County Cattlemen's Association Board Member (Williams 2014)



Cows in Pasture, Cañada Larga

Photo courtesy of Mike Williams

Benefits from Agricultural Lands

Agriculture plays a critical role in maintaining many services supportive of a healthy watershed. Open agricultural and grazing lands provide expanses of permeable land that infiltrates rainwater, thereby reducing runoff and decreasing the potential for flooding. These lands also serve as wildlife corridors and habitat, and provide attractive views and local food.

Because of the growth restrictions in the Ojai Valley (discussed in “3.7.3.4 Land Use Policies”), profitable land use options are limited. Agriculture is a land use allowed within the growth-restrictions, and relative to other potential land use development options, may offer more watershed benefits and less watershed impacts.

Mountain Lion in Orchard, Ojai’s East End, 2015. Orchards provide habitat and movement routes for wildlife.
Photo courtesy of Roger Essick



Citrus on Sale at the Ojai Farmers Market

Photo courtesy of Lisa Brenneis



Trends and Challenges

Though agriculture has long been a part of the landscape in the watershed, its future viability, at least in its current form, is seriously challenged. Water supply issues, high land costs, continued threats from exotic pests, and the challenges of competing in the modern industrial-scale farming business all threaten to destabilize the local industry.

A pressing concern as of early 2015 is the Asian citrus psyllid (ACP).

Asian citrus psyllid (ACP) is an invasive, aphid-like insect pest. Although the psyllid (SIL-lid) is not a serious problem by itself, it can transmit a devastating bacterial disease to citrus trees. Known as Huanglongbing (HLB), the disease ruins the taste and appearance of citrus fruit, and eventually kills infected trees. There is no treatment or cure for Huanglongbing (wong-long-BING), and all commercially valuable varieties of citrus are vulnerable. If ACP and HLB reach Ventura County, and cannot be eradicated or contained, it is likely that the county will cease to be a significant producer of citrus fruit within a decade.

—Farm Bureau of Ventura County website (FBVC 2015a)

So far, HLB has been found in only one tree in southern California; however, there have been five ACP detections in the Ojai Valley as of January 2015. ACP populations in the adjacent Santa Clara River watershed have increased rapidly. When this pest becomes established growers transition to a suppression strategy employing area-wide treatment—coordinated application of pesticides on a schedule three times per year. Area-wide treatment started in Fillmore and Santa Paula in January 2015. Controlling ACP will have a serious impact on the economic viability of citrus production in Ojai Valley (Brenneis 2015).

Another serious agricultural pest, polyphagous shot hole borer (PSHB), is a new pest in southern California. This boring beetle, from the group of beetles known as ambrosia beetles, drills into trees and brings with it a pathogenic fungus (*Fusarium euwallacea*). The PSHB attacks many species of trees, and avocado is a preferred species. Besides killing avocados, PSHB infestation can destroy most of the dominant tree species in the watershed's riparian habitat including coast and valley oak species, California sycamore, red willow, cottonwood, white alder, and California bay laurel. PSHB impact on avocado production is expected to be serious (UCR 2015).

Switching crops in the watershed is not an easy matter. The soil in the Ojai Valley's East End, where the bulk of the farming occurs, is extremely rocky. Tilling the soil is not an option, which significantly limits the type of crops that can be grown in that area should current crops become untenable.

Though agriculture has long been a part of the landscape in the watershed, its future viability, at least in its current form, is seriously challenged.



Oranges Being Taken out of Production, East End Ojai Valley, January 2015

When groundwater basins are low, growers who can purchase water from Lake Casitas at a greater cost. Some growers have no backup water when their wells run dry.

The Ojai Valley is remote from the centers of Ventura County's agricultural infrastructure. Packing houses, agricultural supplies, and support services are miles away. Farm labor crews are also based closer to the center of agricultural production, which makes it more expensive to farm in the watershed.

Concerns about water are growing. Coping with cyclic droughts has always been part of farming in the region, but the 2012-2014 drought (current as of this writing) took the water level in the Ojai Valley Basin down to levels that haven't been seen since 1965.

When groundwater basins are low, growers who can purchase water from Lake Casitas at a greater cost. Some growers have no backup water when their wells run dry. To purchase a new water allocation is prohibitively expensive, and according to Casitas's Water Efficiency and Allocation Program, less than one acre-foot of water remains available to allocate to the agricultural water user category. A great majority of the established agricultural wells and water distribution systems in place now are also old, in some cases inefficient, and in need of costly upgrades.

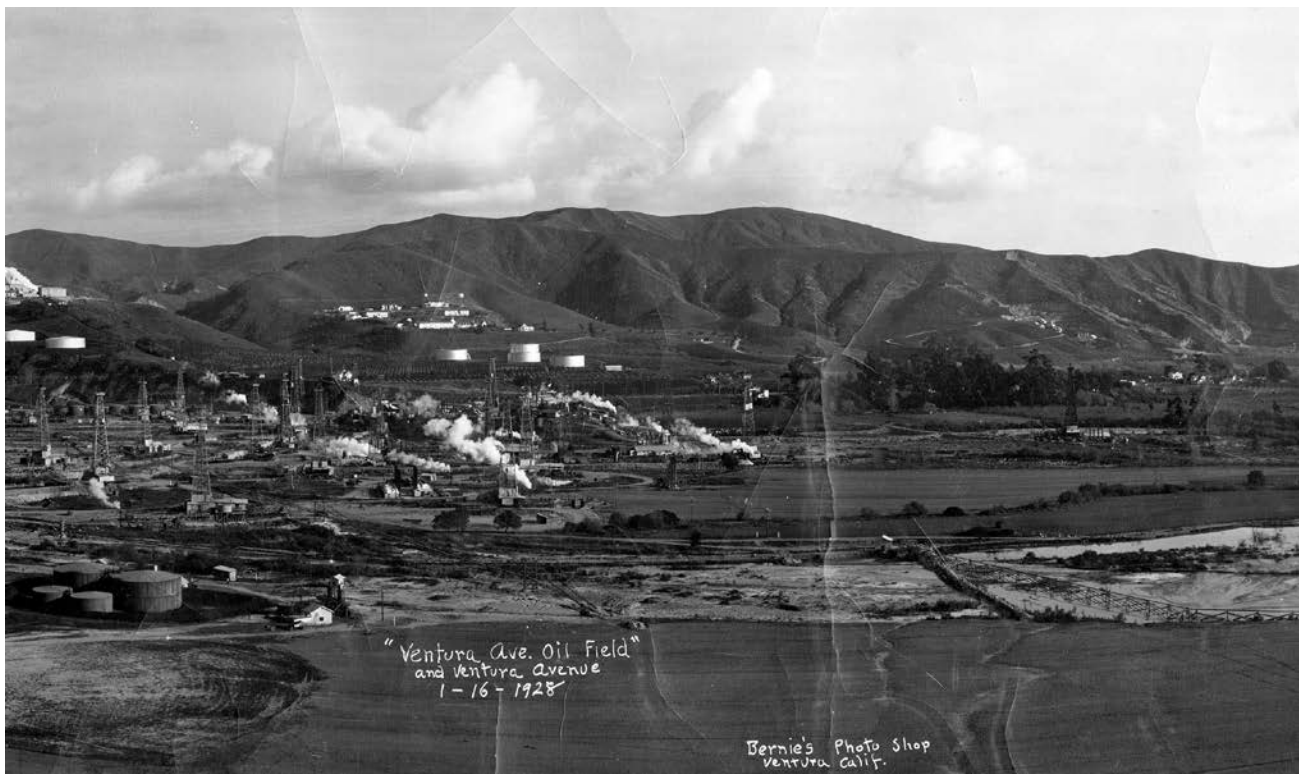
Agricultural operators face difficult and time-consuming processes required to secure multiple permits for many regular maintenance or improvement activities, such as clearing debris from channels. New water quality requirements and monitoring have added additional and considerable costs.

A changing climate threatens to magnify the threats that agricultural operators face: longer droughts, increased pest threats, increased risk of fires, and weather anomalies that interfere with fruit setting and plant growth.

3.7.3.2 Oil Extraction & Industry

As with agriculture, the oil extraction industry has a long history in the watershed.

Drawn to Ventura County by reports of “oil struggling to the surface at every available point,” George Shoobridge Gilbert, referred to as California’s first true petroleum pioneer, began extraction operations at Sulphur Mountain in 1861 (Triem, 1985)... In 1854, oil collected at Sulphur Mountain was refined in home-made stills. The first commercial oil refinery in the county was built in 1861 by Gilbert. It was located in the Ojai Valley and produced between 300 and 400 gallons of refined oil a week (DOG, 1983).



Oil Drilling, Ventura Avenue Area, 1928

Photo courtesy of Museum of Ventura County

Aera Energy

Aera Energy LLC is the primary oil and gas producer in the watershed. Their production averages 13,900 barrels per day of crude oil and 7.8 mmcf per day of natural gas. Oil is transported to refineries in the Los Angeles basin. Natural gas is shipped to Southern California Gas Co. Much of the operation in the watershed is now in secondary recovery water injection. Over 110 employees work directly for Aera in Ventura, and over 600 contractors are employed at the site for daily operations and development.

By the 1880's almost all of the State's oil production was in Ventura County, as the discoveries at Sulphur Mountain, Rancho Ojai, Rancho Sespe, and Rancho Santa Paula became known (DOG, 1983). The most successful early well, discovered in 1865, was "Ojai 6", which is considered to be the first oil well in California to produce commercially (Triem, 1985).

Ventura County experienced tremendous population growth during the 1920's due primarily to the discovery of the Ventura Avenue Oil Field in 1916. By 1926, this field was producing over 20,000 barrels of oil a day and its level of productivity brought in thousands of oilworkers, geologists, engineers, and oil-related businesses to the City of Ventura and outlying areas (Triem, 1985).

—*Ventura County General Plan Resources Appendix* (VCPD 2011)

The Transverse Ranges, of which the watershed is part, is a highly folded and faulted geologic province that has some petroleum-rich sedimentary rocks; this province is an important oil-producing area in the United States. Oil extraction is a significant commercial land use in the watershed, making up about 3.6% of the land area.



Oil Extraction, Lower Ventura River

Photo by Brian Hall, Courtesy of Santa Barbara Channelkeeper and LightHawk

The major oil field in the watershed is the Ventura oil field, an area that covers approximately 3,410 acres on both sides of Highway 33 in the lower watershed near the coast. The Ojai oil field comprises 1,780 acres of active fields (DOGGR 1992). There are over 700 active oil wells in the watershed. In the Ventura oil field an extensive system of well pads and paved and dirt access roads cover the relatively steep and rugged foothills. Figure 3.7.3.2.1 shows the locations of these wells.

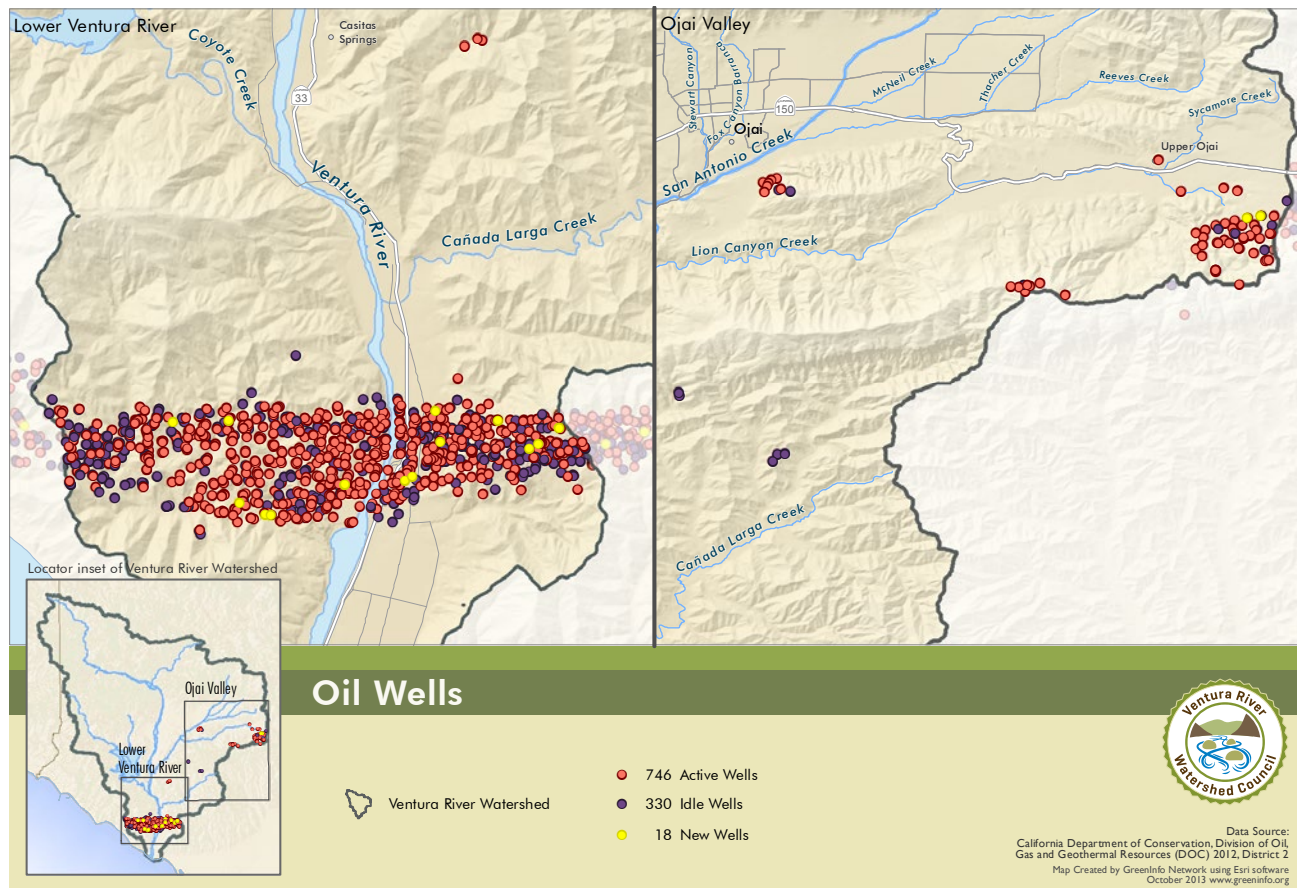


Figure 3.7.3.2.1 Oil Wells Map

Outside of oil fields, the watershed's major industrial land use is in the lower watershed along Ventura Avenue east of the Ventura River. Various manufacturing, construction, processing, and industrial storage facilities occupy this area, a number of which serve as support services to the oil extraction industry.

Brownfields

Brownfields are properties whose reuse, redevelopment, or expansion is hindered by real or perceived environmental contamination. They can be large or small, vacant or developed, abandoned or occupied. Brownfield sites commonly sit idle, or cannot be sold, until contamination concerns are resolved. However, the costs of doing so can be prohibitive.

By the late 1930s, the City of Ventura's Westside was densely occupied with oil wells and related facilities. Oil-related industries and service companies located in the area in support of the growing oil industry and as the Westside became more industrially developed, other industries also gravitated to the area. Besides the oilfields and the Petrochem refinery, industries that have been located in the Westside area include:

- Oilfield companies providing services such as wireline, perforating, well workovers, etc.
- Oil tool and machine shops
- Vacuum truck services
- Oilfield pipe and equipment storage yards
- Waste disposal services that included sumps
- Chemical suppliers
- Oilfield equipment manufacturing
- Rock quarries
- Metal recycling facilities
- A natural gas compression plant
- Bulk fuel storage and sales
- Commercial laundry
- Auto salvage yards
- Metal fabrication
- Various light manufacturing (WCEE 2011)

There are an estimated 30 brownfields in the Ventura Avenue area on the City of Ventura's Westside.

By the 1990s, much of the oil and oil supporting industry had left the Westside area, leaving behind many industrial facilities and the perception that these sites could be contaminated. Today, there are an estimated 30 brownfields in the Ventura Avenue area on the City of Ventura's Westside (City of San Buenaventura 2005). The contaminants potentially associated with these industries include toxic metals, petroleum solvents, chlorinated solvents, semi-volatile hydrocarbons, polychlorinated biphenyls, caustics, and acids (WCEE 2001).

Programs exist at the State and Federal levels to assist communities with assessing and cleaning up brownfields and preparing them for redevelopment. The USEPA's Brownfields Program includes assessment grants, loans, job training grants, and cleanup grants (USEPA 2013c). Unfortunately, due to a federal "petroleum exclusion," which excludes many petroleum-based products (such as crude oil, gasoline, and diesel fuels) from the definition of hazardous substance, funding for rehabilitation of brownfields may not be used on properties with only petroleum-based contaminants (WCEE 2001). Therefore, several sites along Ventura Avenue remain in disrepair, but have not been eligible to

receive brownfield-related funding because of the petroleum exclusion policy provision.

One of the actions (Action 4.26) identified in the City of Ventura's General Plan is to "Seek funding for cleanup of sites within the Brownfield Assessment Demonstration Pilot Program and other contaminated areas in West Ventura." (City of San Buenaventura 2005)

Abandoned Petrochem Refinery

The watershed is home to one brownfield, known as "Petrochem," that is a familiar site to anyone driving between Ojai and Ventura. This large, blighted and abandoned oil refinery has been part of the landscape in the lower Ventura River for decades. The 98-acre facility is located on the east side of the Ventura River and west of Crooked Palm Road, just south of Brooks School of Photography.

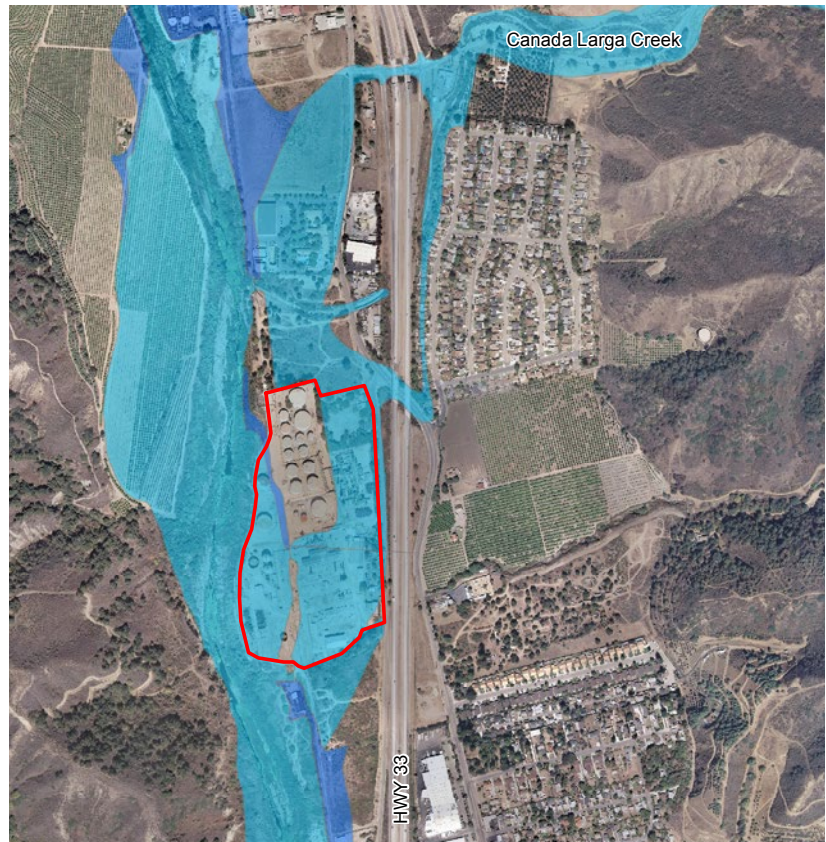
Most of the site is located within the 1% annual exceedance probability (AEP) flood zone (formerly called the 100-year flood zone). When abandoned, the site contained refining units; a tank farm; ammonia, nitric acid, and urea plants; and six underground storage tanks (UST) that stored motor vehicle fuel and fuel additives (Shaw 2005).



Abandoned Petrochem Facility

Photo courtesy of Michael McFadden

Petrochem Site in Flood Hazard Zone Map. Petrochem site footprint in red; 1% annual exceedance probability (AEP) flood zone (formerly called the 100-year flood zone) in light blue.



Operational History. Originally a lemon orchard, the site was purchased by Shell Oil Company in 1952 (CDHS 1985). Shell Oil built the Kellogg ammonia plant in 1953, which was expanded in 1959. Ammonia and urea were sold for use as fertilizers to local agricultural operations (Shaw 2005). In 1969, the plant survived a severe flood. One tank, which normally contained a solution of ammonium nitrate and urea, was lost; but the overall impact on the plant was minor (VCERA 1974). The Kellogg system was shut down in 1972 because of the poor ammonia market (VCERA 1976).

The California Oil Purification Company (COPCO) purchased the land from Shell Oil and was granted a Conditional Use Permit (CUP) 1973 to construct and operate an oil refinery (VCERA 1976). U.S.A. Petroleum acquired COPCO in 1973 and started operations in 1974 (CDHS 1985). In November 1974 COPCO was granted a CUP to reactivate the ammonia plant and expand their oil processing and storage tank facilities (VCERA 1976).

Shut Down. In 1983, U.S.A. Petroleum submitted an application to the County to expand the facility. The proposal was strongly opposed by local groups. Citizens to Preserve the Ojai (CPO) filed suit challenging that the County's Environmental Impact Report did not adequately address the cumulative air quality impacts because it did not evaluate the onshore effect of outer continental emissions (Citizens to Preserve the Ojai v. County of Ventura, 1985). CPO won the case.



Abandoned Petrochem Facility. The refinery was shut down in 1984, and has been sitting idle since.

The refinery ceased operation in 1984 (VCEHD 2008) and has sat idle ever since—corroding, rusting, and providing creative opportunities for local graffiti artists. Signs warning of contamination are posted along the perimeter of the property.

Monitoring and Cleanup. Since 1989, various soil and groundwater investigations have been conducted at the site. These investigations have included the installation of exploratory soil borings and a number of monitoring wells (VCEHD 2008). As different monitoring and cleanup efforts have progressed, new monitoring wells have been required in additional locations, some to further define the property’s subsurface soil and groundwater impacts.

Six underground storage tanks and associated contaminated soils were removed in 1989 (Shaw 2005), and additional hydrocarbon-contaminated soil has been discovered over the years and requirements issued for its excavation and removal.

A 2005 report concluded that: “A defined plume of groundwater impact exists on the site” (Shaw 2005). In 2006, soil and groundwater assessments indicated that residual hydrocarbons were present in capillary fringe soils and in “pooled” groundwater present in the underground storage tank/dispenser island excavation (VCEHD 2008).

In 2012, the United States Environmental Protection Agency (USEPA) issued an enforcement order to USA Petroleum Corporation related to discharges of oil contaminants at the site. The action also transferred to the USEPA jurisdiction over cleanup operations at the facility.

“The location of the oil discharge noticed herein is in multiple locations throughout the refinery, and the U.S. Environmental Protection Agency (“EPA”) has determined that the discharge of oil was created by leaking pipes, process equipment and tanks that threatens the Ventura River.” (USEPA 2012a) The order called for the removal of all “oil, oily sludge,

oil contaminated soil, oil contaminated debris, oily water or refining chemicals.” In a May 2014 letter, the USEPA determined that there was no evidence of an ongoing threat to the Ventura River from the facility and that all required removal actions had been met (USEPA 2014).

The County and the current owner of the property have entered into an agreement which calls for the removal of the remainder of the refinery equipment by the end of 2015. Through the efforts of the County and the property owner, all of the oil storage tanks and most of the equipment outside of the main refinery were demolished and removed in 2014 (Stephens 2015).

Development Proposals. There have been a number of proposals for development of the Petrochem site since its closure. Repurposing the site faces many challenges. There is the expense and liability of cleaning it up, along with the fact that it is in the 1% AEP flood zone.

There are overlapping land use jurisdiction issues to overcome. While the property is located in the County unincorporated area, and therefore subject to the County’s land use policies, it is also in the City of Ventura’s Sphere of Influence. Because the property can be annexed into the City, the City would also need to support any development proposed on the site. The City would like a project that provides jobs; the County has traffic policies that precluded increased peak traffic on Highway 33. The City would like mixed use; the County’s development code does not provide for mixed use. Annexation by the City would be appropriate if the site were to be developed, given the County’s Guidelines for Orderly Development. However, the City would have to carefully consider whether the cost to extend City services to the property makes good financial sense.

The most recent development proposal included a proposed dedication of about half of the 98-acre site—the land nearest the river—for preservation purposes.

3.7.3.3 Protected Lands

As illustrated in Figure 3.7.3.3.1, protected lands make up a significant part—57%—of the Ventura River watershed.

The Bureau of Reclamation owns 9,401 acres (6.5%) of the watershed surrounding Lake Casitas. Another 3,655 acres (2.5%) is protected as natural habitat, open space, or parkland.

Two local land conservancies, along with the California Coastal Conservancy, are actively acquiring special habitat lands and, in many cases, making those lands accessible to the public to enjoy. Figure 3.7.3.3.2 shows the areas of interest of the Ojai Valley Land Conservancy and the Ventura Hillsides Land Conservancy.

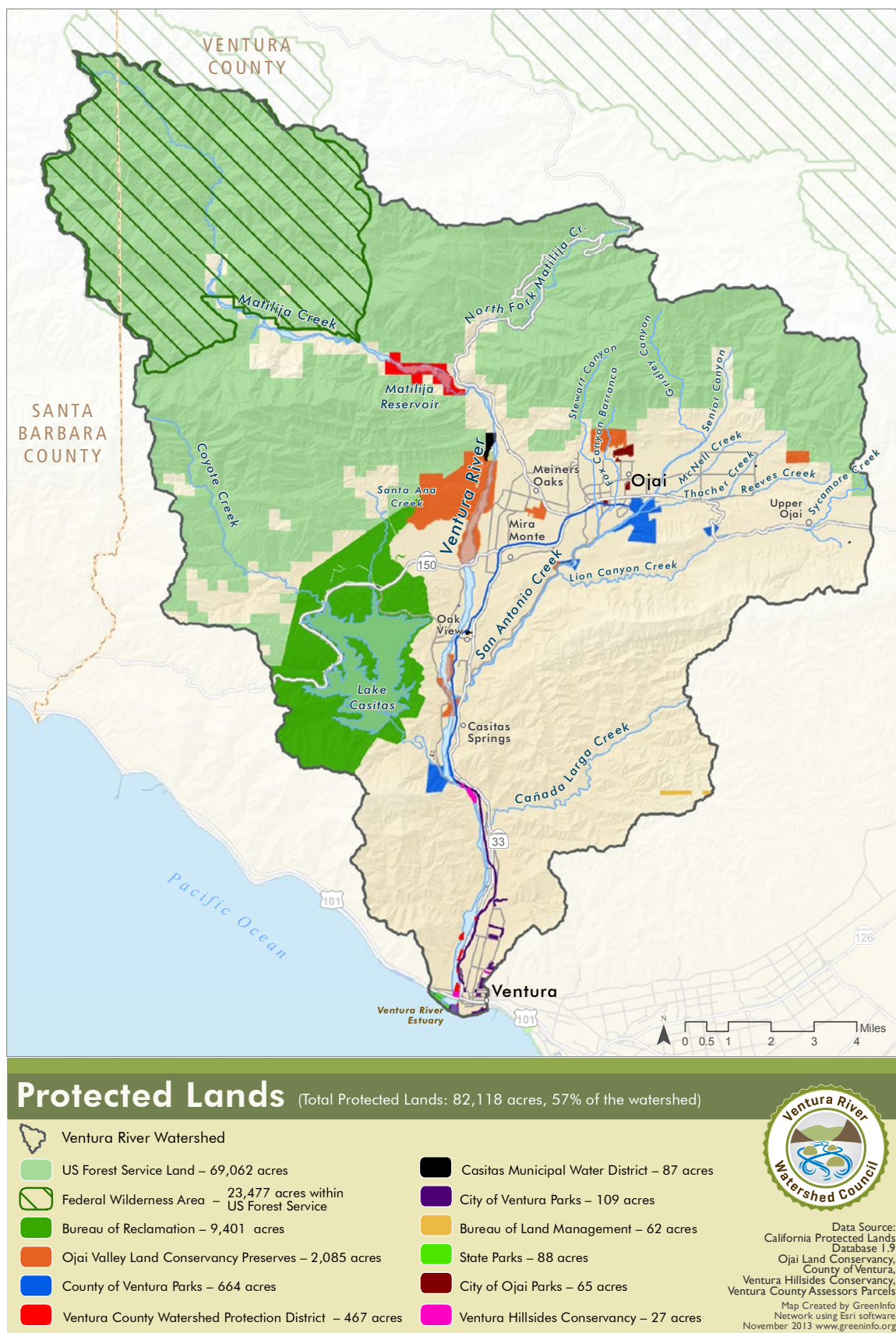


Figure 3.7.3.3.1 Protected Lands Map



Figure 3.7.3.3.2 Land Conservancy's Areas of Interest Map

3.7.3.4 Local Land Use Policies

Development is unusually limited in the Ventura River watershed. There are a number of reasons for this. Steep terrain is one factor: only 35 out of the watershed's total 226 square miles have a slope of 10% or less. Citizen activism is another reason. Even before the passage of the California Environmental Quality Act, the Endangered Species Act, and other policies that now serve to protect resources and balance growth, citizens in the watershed were actively engaged in protecting local landscapes. Development proposals—such as one to build a freeway through Ojai from Carpinteria to Santa Paula, and another to mine uranium in Lake Casitas's watershed—were stopped due in large part to citizen activism (Coyne 2009).

Finally, local land use policies and regulations have played and continue to play a very significant role in shaping development on privately owned land in the watershed. This section summarizes some of those key policies and regulations. The water supply management policies of Casitas Municipal Water District (CMWD) also play a significant role in constraining development. See “3.4.3 Water Demands” for a discussion of CMWD's policies.

Key current land use policies include:

- Ventura County:
 - Guidelines for Orderly Development
 - Ojai Valley Area Plan, Minimum Parcel Size & Traffic Policies
 - Ventura County SOAR Ordinance
- City of Ojai's Growth Control Policies
- City of Ventura:
 - City of Ventura SOAR Ordinance
 - Infill First

Guidelines for Orderly Development

In the world of land use planning, Ventura County is held up as a national model for successfully limiting the sprawl-type of development that has characterized much of California. The County's Guidelines for Orderly Development (Guidelines) has been a key policy in this regard. Originally adopted by the County of Ventura and the Local Agency Formation Commission in 1969, and since adopted by all the cities in the County, the Guidelines represent a unique cooperative land use policy.

The Guidelines establish the shared, countywide objective that urban development should occur, whenever and wherever practical, within incorporated cities and not in the unincorporated county (VCPD 2009).

Local land use policies and regulations have played and continue to play a very significant role in shaping development on privately owned land in the watershed.

This policy helps prevent urban encroachment into agricultural and open space areas.

According to the Guidelines (VCPD 2009) development shall be considered “urban” if it meets any of the following criteria:

1. It would require the establishment of new community sewer systems or the significant expansion of existing community sewer systems
2. It would result in the creation of residential lots less than two (2) acres in area; or
3. It would result in the establishment of commercial or industrial uses which are neither agriculturally-related nor related to the production of mineral resources.

In the world of land use planning, Ventura County is held up as a national model for successfully limiting the sprawl-type of development that has characterized much of California.

The objective is to allow “for urbanization in a manner that will accommodate the development goals of the individual communities while conserving the resources of Ventura County,” as well as to promote “efficient and effective delivery of community services for existing and future residents.” (VCPD 2009)

The Guidelines also have policies to ensure that any proposed development in communities that already exist in the unincorporated county is consistent with the intent of the Guidelines.

The result of the implementation of the Guidelines has been that the County does not compete for urban development with cities (LAFCO 2014), and this has helped maintain distinct boundaries between communities, and distinguish urban and rural areas. In the Ventura River watershed, where incorporated cities only comprise 3% of the land area, this is an especially relevant policy.

General Plans

State law mandates that each city and county in California prepare and adopt a comprehensive, long-term general plan for the physical development of that jurisdiction. General plans set forth the goals, policies, and programs that jurisdiction will implement to manage future growth and land uses. General plans are intended to embody the vision for the future of the jurisdiction. (Government Code Sec. 65300)

Ojai Valley Area Plan

The Ventura County General Plan (VCGP) includes several “area plans” that contain goals, policies, and programs to shape development in specific geographic areas. Area plans are consistent with the overarching VCGP, but address the particular needs and nuances of a given location. Two area plans are applicable in the Ventura River watershed: Ojai Valley Area Plan and North Ventura Avenue Area Plan. The Ojai Valley Area Plan, which covers a vast area of the watershed and has been important in shaping the watershed’s development, is discussed below. The North Ventura Avenue Area Plan covers a much smaller area, much of which is already developed.

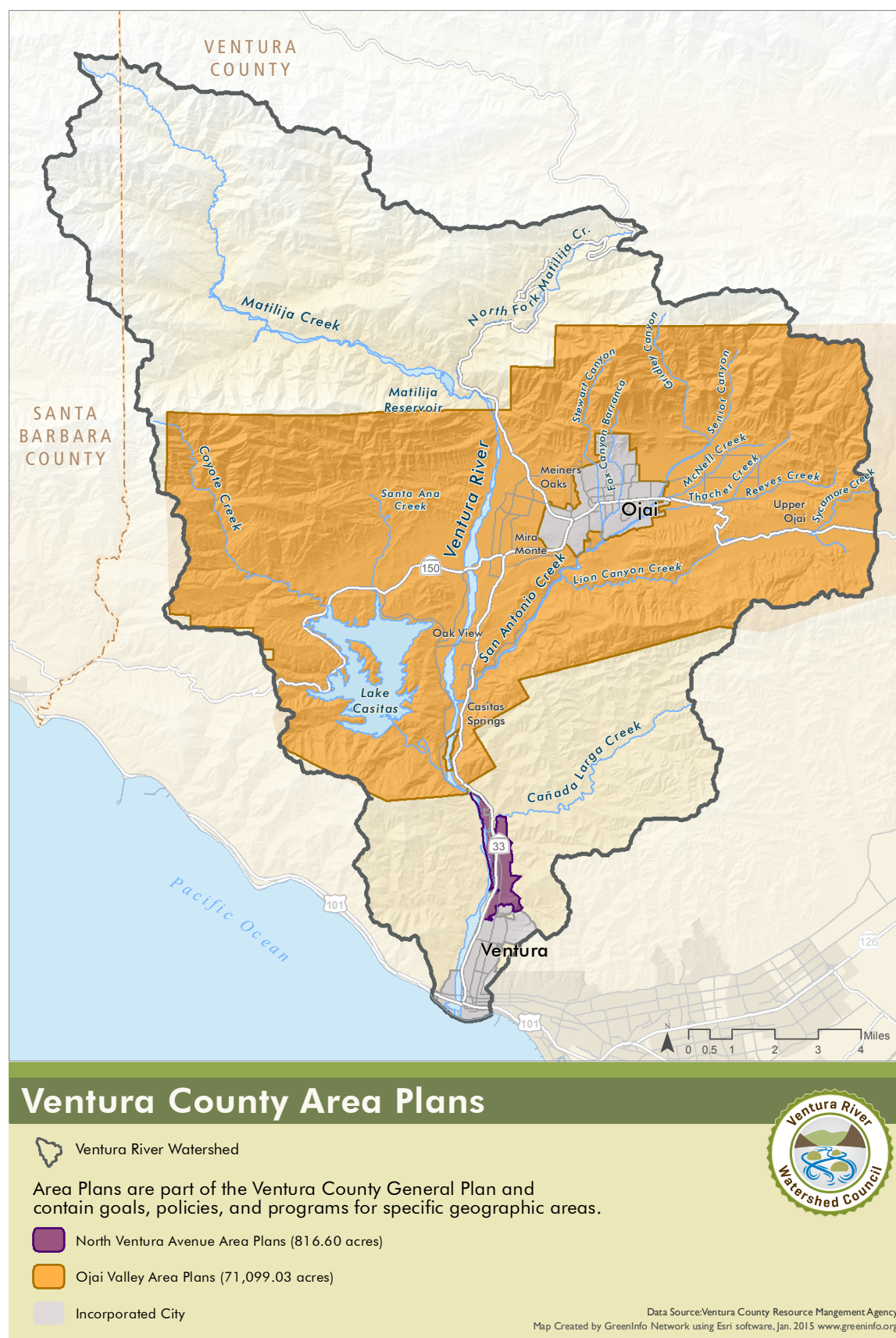


Figure 3.7.3.4.1 Ventura County Area Plans Map

Ojai Valley Area Plan History

The first Area Plan governing the Ojai Valley was part of the Land Use Element of the General Plan for Ventura County and was adopted in 1963.

In March, 1977, the Board of Supervisors adopted an Emergency Ordinance to restrict subdivisions in the Ojai Valley because questions were raised regarding the cumulative impacts on air quality, traffic and water supply. They established a technical task force to prepare a report on the status of services and the quality of the physical environment in the Valley. In conjunction with that effort, County staff began work on the Ojai Valley Area Plan, which was subsequently adopted by the Board of Supervisors on August 14, 1979.

—*Ventura County General Plan: Ojai Valley Area Plan* (VCPD 2008)

The Ojai Valley Area Plan governs about 74,000 acres—51% of the land in the watershed.

The Ojai Valley Area Plan governs about 71,000 acres—49% of the land in the watershed. Key policies within the plan that have limited development are those establishing large minimum parcel sizes for open space lands, and those that address the limited traffic capacity of Highway 33.

Large Minimum Parcel Sizes

With the exclusion of small areas of land of urban development, most of the land area with the Ojai Valley Area Plan is designated as Open Space in the VCGP. Open space (OS) is defined as “any parcel or area of land or water which is essentially undeveloped for human use and devoted to an open space use, such as the preservation of natural resources, managed production of resources, outdoor recreation, and preservation of public health and safety” (VCPD 2013).

When the Ojai Valley Area Plan was written, it established four subcategories for that OS-designated land, each with a different minimum parcel size. The minimum parcel size for the OS 10 subcategory is 10 acres, OS 20 is 20 acres, OS 40 is 40 acres and OS 80 is 80 acres. Of the parcels within the Ojai Valley Area Plan boundaries, very little is designated OS 10 or OS 20. Most land is designated OS 40 or OS 80.

The VCGP requires that subdivisions of land meet the most restrictive minimum parcel size requirements (§3.1.2-6). Once a parcel is subdivided, the landowner has a development right to build a dwelling and a second dwelling with a non-discretionary permit. The large minimum parcel of OS designated lands restricts development by preventing its subdivision into smaller parcels and subsequent development of those properties by right.

Highway 33 Traffic Policies

The VCGP sets forth acceptable levels of service (LOS) for each roadway within the County. LOS is usually measured during the peak commuting hour(s) of the day, and ratings range from A to F: LOS-A being the best or having the lowest traffic volumes and LOS-F being the worst, or having the highest traffic volumes. The lowest LOS allowed in the VCGP is LOS-D for county thoroughfares and state highways, however the Ventura County Board of Supervisors has accepted LOS-E for Highway 33 between the northerly end of the freeway (near Casitas Springs) and the City of Ojai.

The Ojai Valley Area Plan established transportation policy §4.1.2-3, which states that Area Plan land use designation changes, zoning changes, and discretionary developments must be evaluated for individual and cumulative impacts on existing and future roads. This is often referred to as the “cumulative traffic analysis.”

The cost to mitigate cumulative impacts is the problem. Ojai Valley Area Plan transportation policy §4.1.2-4 states that Area Plan land use designation changes, zoning changes, and discretionary developments are prohibited unless feasible mitigation measures are adopted that would ensure that the impact does not occur or unless a full funding commitment for roadway improvements is adopted.

Given that the minimum acceptable LOS for Highway 33 (between Casitas Springs and the City of Ojai) is LOS-E, and that portions of the highway are currently operating at LOS F, a full funding commitment to make the necessary roadway improvements would be required before any discretionary development could go forward. However, CalTrans has no approved capital improvement plan or full funding commitment to widen Highway 33. Thus, discretionary development would most likely not be approved if it would add traffic (one trip) to Highway 33 during peak commute times (southbound during AM peak, northbound during PM peak). Ministerial development (e.g., dwellings on an existing lot) is not subject to these traffic policies.

Finally, policy §4.1.2-4 -5 states that Highway 33 is limited to two lanes between Oak View and the City of Ojai, and that south of Oak View it is limited to as few lanes as necessary to accommodate projected traffic pursuant to the City of Ojai General Plan and the Ventura County Ojai Area Plan.

These policies have significantly limited discretionary development of any size in the Ojai Valley.

City of Ojai's Growth Control Policies

Land use policies in the City of Ojai related to air quality and traffic have resulted in the City having a very slow rate of development.

Growth Management Plan

In order to comply with the provisions of the Clean Air Act and the Ventura County Air Quality Management Plan, the City of Ojai adopted a Growth Management Plan in 1979, which has had a substantial impact on the City's population growth. The plan limits residential development through an annual permit allocation process (City of Ojai 2015).

Air quality in the Ojai Valley is the basis of the City's Growth Management Plan and associated policies in the Circulation and Air Quality Elements of the Ojai General Plan.

In order to comply with the provisions of the Clean Air Act and the Ventura County Air Quality Management Plan, the City of Ojai adopted a Growth Management Plan in 1979, which has had a substantial impact on the City's population growth.

Ozone, the main ingredient of "smog," is the most serious and widespread of air pollution problems in the country. The federal ozone standard is the only federal clean air standard that the County does not meet and is the focus of regulation under the 2007 Air Quality Management Plan ("AQMP"). Geographic areas that exceed federal clean air standards are referred to as "non-attainment areas." The County is a "moderate" non-attainment area for the federal eight-hour ozone standard, and is a "severe" nonattainment area under state standard. In the County, smog levels generally reach their peak during summer afternoons. Sea breezes will push the smog inland. As a result, inland areas, such as Ojai, have the highest ozone levels and the most days in which federal and state air quality standards are exceeded.

The City's Growth Management Plan and associated policies in the Ojai General Plan link population growth to increases in air pollution. Although counterintuitive, dramatic improvement has been realized in the County's air quality since 1986 despite a 32% increase in total population from 618,880 persons in 1987 and 817,315 persons in 2006. This is explained by increased restrictions on automobile emissions over the same time period; regulations over which the City neither has control nor the authority to implement. Furthermore, Ojai's air quality is largely influenced by geographic and climatic conditions that transport ozone from population outside of the City. These facts notwithstanding, the City's moderation of population growth through limits on annual permit allocations dovetails with the AQMP that promotes air quality improvement in gradual increments. Until the County is no longer deemed a "severe" non-attainment area (with Ojai and Simi Valley having the highest ozone concentrations), the

City growth management policies affirmatively further State and Federal air quality goals. Absent full attainment, the community's health and safety is at risk.

—*Ojai Housing Element Update, Planning Horizon: 2006 to 2014* (City of Ojai 2012)

Traffic Policies

The City of Ojai's General Plan Circulation Element has policies that are companion to the County's traffic policies (discussed above) addressing the LOS of Highway 33. These policies establish minimum acceptable traffic volumes.

Policies 1, 2 and 3 have direct impact on residential growth by limiting the amount and intensity of future development through the establishment of minimum acceptable traffic volumes. Separate yet related policies appear in the City's Air Quality Element and are translated in the form of a Growth Management Program.

—*Ojai Housing Element Update, Planning Horizon: 2006 to 2014* (City of Ojai 2012)

Land Conservation Act

The County of Ventura has long been an enthusiastic participant in the state's Land Conservation Act (LCA) program, which provides tax rate reductions as an incentive for maintaining land in agriculture.

The LCA (also known as the Williamson Act) was adopted by the State Legislature in 1965 and has been implemented in Ventura County since 1969. Under LCA contracts, property owners agree to keep their land in agricultural production, grazing, or open space (wildlife habitat) for a period of 10 or 20 years in exchange for a statutory percentage reduction in the taxable value of the property, depending on the time frame of the contract (20 to 30 percent maximum for prime land and 10 percent maximum for non-prime land under a 10-year agricultural or open space contract, and 35 percent maximum for prime land under a 20-year contract).

—*Staff Report to the Ventura County Board of Supervisors on Land Conservation Act Program* (VCPD 2013a)

As of January 2015, there were approximately 24,409 acres of land enrolled in the County's LCA program in the watershed (VCRMA 2015). Because of the 10- to 20-year contracts involved and the financial incentives, the LCA program encourages protection of agricultural and grazing lands.

As of January 2015, there were approximately 24,409 acres of land enrolled in the County's Land Conservation Act program in the watershed.

SOAR Ordinances, Ventura County and City of Ventura

SOAR ordinances effectively put changes to city boundaries and county general plan amendments in the control of voters

In the late 1990s and early 2000s, there was a coordinated citizen effort to get ballot initiatives passed by all eleven local governments in Ventura County that would require voter approval to develop farmland and open space. The citizen campaign was called “Save Open Space and Agricultural Resources” (SOAR) and it resulted in the adoption of SOAR ordinances by nine local governments. SOAR ordinances effectively put changes to city boundaries and county general plan amendments in the control of voters (Smith 2011).

Two SOAR ordinances affect the Ventura River watershed: the County of Ventura’s, which was enacted in November, 1998 and expires December 31, 2020; and the City of Ventura’s, which was enacted in November, 1995 and expires December 31, 2030. The City of Ojai did not adopt a SOAR ordinance (Smith 2011).

Generally, the SOAR ordinances have been very effective in reducing the conversion of agricultural and open space designated lands to other, more intense land uses. In the County of Ventura, the number of privately initiated General Plan amendment applications fell significantly, and the electorate has approved few amendments (Smith 2015).

Infill First

The City of Ventura’s General Plan outlines an “Infill First” policy which has served to protect open space resources:

The passage of SOAR, the Hillside Voter Protection Area, and other land-use constraints, along with natural boundaries, such as the ocean and the rivers, make it abundantly clear that before we expand outward any further, we must pursue an “Infill First” strategy. Such a strategy will help avoid sacrificing farmland and sensitive areas in our hillsides and along our rivers.

Our “Infill First” strategy for Ventura means avoiding suburban sprawl by directing new development to vacant land in the City and Sphere of Influence (with the exception of SOAR land), and by focusing new public and private investment in carefully selected districts, corridors, and neighborhood centers where concentrated development and adaptive reuse will improve the standard of living and quality of life for the entire community.

—City of San Buenaventura, 2005 Ventura General Plan (City of Ventura 2005)

3.7.3.5 Key Data and Information Sources/ Further Reading

Below is a summary of some of key documents that address land use and associated policies in the watershed. See “4.3 References” for complete reference citations.

Acronyms

ACP—Asian citrus psyllid

AEP—annual exceedance probability

CMWD—Casitas Municipal Water District

CPO—Citizens to Preserve the Ojai

HLB—Huanglongbing

IPM—Integrated Pest Management

LCA—Land Conservation Act

LOS—Level of Service

OS—Open Space

PSHB—polyphagous shot hole borer

SOAR—Save Open Space and Agricultural Resources

USEPA—United States Environmental Protection Agency

UTS—underground storage tanks

City of San Buenaventura, 2005 Ventura General Plan (City of Ventura 2005)

City of San Buenaventura, Downtown Specific Plan (City of Ventura 2007) City of Ventura, 2005 General Plan Environmental Impact Report (City of Ventura 2005a)

City of Ventura Administrative Report, Agenda Item No. 2: Receive Market Overview and Fiscal Analyses of the Westside and North Avenue Area Community Plan, Including Canada Larga (City of Ventura 2011)

Final Environmental Impact Report for California Oil Purification Company Modification to Conditional Use Permit No. 3393. (VCERA 1974)

Final Environmental Impact Report for Modification to Conditional User Permit No. 3393-A, USA Petrochem (VCERA 1976)

Guidelines for Orderly Development (VCPD 2009)

Historical Overview: The Ventura Brownfield Project, A Look at the Environmental History of Ventura’s Westside (WCEE 2001)

Land Management Plan: Part 2 Los Padres National Forest Strategy (USFS 2005a)

Ojai General Plan – Circulation Element (City of Ojai 1997)

Ojai General Plan – Conservation Element (City of Ojai 1991)

Ojai Housing Element Update, Planning Horizon: 2006 to 2014 (City of Ojai 2012)

Preliminary Endangerment Assessment; Former USA Petroleum Facility (Shaw 2005)

Site Background Information; Former USA Refinery. LUFT Site File C-05021, October 15, 2007-April 2008 (VCEHD 2008)

Ventura County General Plan: Goals, Policies and Programs (VCPD 2013)

Ventura County General Plan: Ojai Valley Area Plan (VCPD 2008)

Ventura County General Plan: Resources Appendix (VCPD 2011)

Vision Plan for the Lower Ventura River Parkway (CalPoly 2008/2010)