Coachella Valley Water District
2018 Crop Report

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Introduction

Making every drop count... ***Since 1918***

The Coachella Valley Water District's (CVWD) 2018 Crop Report (Report) summarizes the crop types, crop acreage, irrigation methods, and the estimated gross value of agricultural production within CVWD's Improvement District No. 1 (ID1). The Report also summarizes, on a monthly basis, the Colorado River water delivered (metered) inside and outside of ID1. The total water consumption also includes deliveries to the Mid-Valley Pipeline for non-potable consumption, and to the Thomas E. Levy Groundwater Replenishment Facility for groundwater replenishment. This Report does not include groundwater production within CVWD's boundary, inside or outside ID1. The CVWD 2019-2020 Engineer's Report on Water Supply Replenishment Assessment includes groundwater production and is located at CVWD's West Whitewater River Subbasin web page http://www.cvwd.org/203/West-Whitewater-River-Subbasin.

The valuations contained in this Report represent the gross value of products and do not reflect costs associated with production, marketing, or transportation. The Report does not consider any net income, profit, or loss to producers. The crop values represent only crops grown inside ID1.

The acreage data in the Report includes all seasonal vegetables, permanent crops, non-bearing permanent crops, polo fields, golf courses, and wetlands located inside ID1 as depicted in Figure 32.

CVWD provides customers Colorado River water (canal water) for seasonal vegetables and permanent crops including, bearing and non-bearing date trees, grapes, figs, mangoes, peaches, and citrus varieties. Other uses of canal water include irrigation for polo fields, golf courses inside and outside ID1, maintenance of wetland areas such as duck ponds, and replenishment of the groundwater basin. Customers have the ability to utilize both canal and groundwater in the production of their crops and as such, this report should not be utilized to determine the actual crop water consumption on a per acre basis.

Executive Summary

The gross crop production for Calendar Year 2018 is valued at, $585,715,889, which represents a 3.0% decrease over the 2017 value of $603,983,093. The gross farmed acreage (primary and secondary) for 2018 is 61,933 acres, which represents a 6.2% decrease compared to 2017. The decrease in cropped acreage is attributed to idle farmland in various crop rotations, and the removal of several acres of permanent crops such as grapes and citrus trees. There has been a steady decline in grape production value and acreage, and inversely, a steady increase in date production value and acreage.

Crop Values

The "Top Seven" crops, by both value and acreage, were grapes, dates, bell peppers, lemon-lime, turf grass, carrots and lettuce. These crops accounted for 69% of the accumulated crop value and 59% of the total crop acreage. Figures 1 and 2 provide a summary of all crop values and crop acreage.

The overall crop value trend has been steadily decreasing since 2015 as can be seen in Figure 3, which depicts the 5-year history of crops by value. The overall decrease in crop valuation from 2015 to 2018 is 21.3%. The individual crops with significant (greater than 10%) uptrends were dates, cauliflower and celery, while grapes and lemon-limes continue on a downtrend in value. Please refer to tables and graphs on Figures 5 through 14 on pages 9 – 13 which depict the 5-year trend of the top 10 crops by value.

Overall, the amount of acreage in production is down by approximately 4,000 acres. The major three crops contributing to this downward trend are Bell Peppers, Carrots, and Grapes, which decreased by 22.8%, 17.6%, and 11.9%, respectively. All other top ten crops by acreage planted have remained relatively flat. See Figures 15 – 26 on crops by acreage on pages 13 through 18 for further details by crop.

Figures 29 through 31 depict the 5-year history of acreage irrigated but not harvested, crop acreage by irrigation method and the total canal water consumption by month. These tables show the trends in irrigation method, and the canal water consumed by CVWD agricultural customers.

In 2018, CVWD continued to utilize Geographic Information Systems (GIS) mapping software to identify crops and accurately measure crop acreage in the field. GIS has become an essential part of crop-reporting methods. The GIS maps are beneficial to evaluate trends in cropping types and irrigation methods. An example of an irrigation methods map is in the appendix.

This report also contains the annual U.S. Bureau of Reclamation (USBR) Crop and Water Data (Form 7-2045) as supplemental data to the CVWD Crop Report. The USBR Form 7-2045 is required of all Colorado River Contractors and is used to document crop acreage, production, price and Colorado River water used inside and outside ID1, including water to the customers served off the Mid-Valley Pipeline. A further explanation of the source of data in the USBR form 7-2045 is located in the appendix of this report.

FIGURE 1: 2018 Crop Values and Accumulated Values

Crop Description	Value*	%	Cumulative Value	Cumulative %	
Grapes	$109,391,868	18.7	$ 109,391,868	18.7	Top 7
Dates	$77,859,000	13.3	187,250,868	32.0	
Bell Peppers	$67,866,593	11.6	255,117,461	43.6	
Lemon-Lime	$50,927,746	8.7	306,045,207	52.3	
Golf Course Turf	$49,098,771	8.4	355,143,978	60.6	
Carrots	$25,651,500	4.4	380,795,478	65.0	
Lettuce	$23,904,664	4.1	404,700,142	69.1	
Cauliflower	$18,291,989	3.1	422,992,131	72.2	
Nursery-Trees	$17,104,784	2.9	440,096,915	75.1	
Celery	$11,542,839	2.0	451,639,754	77.1	
Orange-Tangerine	$10,933,103	1.9	462,572,857	79.0	
Oriental Vegetables	$10,360,770	1.8	472,933,627	80.7	
Sweet Corn	$9,643,129	1.6	482,576,756	82.4	
Artichoke	$9,503,983	1.6	492,080,739	84.0	
Green Bean	$9,362,741	1.6	501,443,480	85.6	
Misc. Fish Farm	$8,602,945	1.5	510,046,425	87.1	
Turf Grass	$8,441,771	1.4	518,488,196	88.5	
Spinach	$7,672,717	1.3	526,160,913	89.8	
Broccoli	$7,651,768	1.3	533,812,681	91.1	
Okra	$6,046,875	1.0	539,859,556	92.2	
Grapefruit	$4,516,803	0.8	544,376,359	92.9	
Polo Fields	$4,094,950	0.7	548,471,309	93.6	
Melon-Watermelon	$4,082,736	0.7	552,554,045	94.3	
Spice	$3,767,676	0.6	556,321,721	95.0	
Tomatoes	$3,666,000	0.6	559,987,721	95.6	
Nursery-Plants	$2,753,378	0.5	562,741,099	96.1	
Cabbage	$2,672,400	0.5	565,413,499	96.5	
Kale	$2,342,357	0.4	567,755,856	96.9	
Eggplant	$2,279,200	0.4	570,035,056	97.3	
Chili Peppers	$2,067,795	0.4	572,102,851	97.7	
Onion-Green	$2,021,544	0.3	574,124,395	98.0	
Squash	$2,003,984	0.3	576,128,379	98.4	
Potatoes	$1,520,982	0.3	577,649,361	98.6	
Radish	$1,429,763	0.2	579,079,124	98.9	
Fig	$1,147,125	0.2	580,226,249	99.1	
Sugar Beets	$1,121,991	0.2	581,348,240	99.3	
Mangoes	$972,563	0.2	582,320,803	99.4	
Hay-Alfalfa	$815,760	0.1	583,136,563	99.6	
Olives	$714,875	0.1	583,851,438	99.7	
Strawberries	$510,576	0.1	584,362,014	99.8	
Bokchoy	$432,600	0.1	584,794,614	99.8	
Misc. Fruit	$327,635	0.1	585,122,249	99.9	
Melon-Honeydew	$214,368	0.0	585,336,617	99.9	
Pasture-Permanent	$210,000	0.0	585,546,617	100.0	
Peaches	$133,000	0.0	585,679,617	100.0	
Duck Ponds	$36,272	0.0	585,715,889	100.0	
	$ 585,715,889	100.0			

NOTE: The Top 7 crops by value and acreage are identical (though different order), and they account for 69% of the accumulated value.

FIGURE 2: 2018 Crop Acreage and Accumulated Acreage

Crop Description	Acres*	%	Cumulative Acres	Cumulative %	
Dates	8651	14.0	8,651	14.0	Top 7
Grapes	6283	10.1	14,934	24.1	
Golf Course Turf	6043	9.8	20,977	33.9	
Carrots	4886	7.9	25,863	41.8	
Lemon-Lime	4339	7.0	30,202	48.8	
Bell Peppers	3479	5.6	33,681	54.4	
Lettuce	3071	5.0	36,752	59.3	
Sweet Corn	1843	3.0	38,595	62.3	
Dates-N/B (non-bearing)	1525	2.5	40,120	64.8	
Oriental Vegetables	1437	2.3	41,557	67.1	
Pasture-Permanent	1400	2.3	42,957	69.4	
Cauliflower	1345	2.2	44,302	71.5	
Orange-Tangerine	1113	1.8	45,415	73.3	
Nursery-Trees	1112	1.8	46,527	75.1	
Turf Grass	1039	1.7	47,566	76.8	
Spice	1012	1.6	48,578	78.4	
Broccoli	981	1.6	49,559	80.0	
Grapes- N/B	928	1.5	50,487	81.5	
Artichokes	864	1.4	51,351	82.9	
Green Bean	857	1.4	52,208	84.3	
Lemon-Lime - N/B	838	1.4	53,046	85.7	
Duck Ponds	775	1.3	53,821	86.9	
Okra	750	1.2	54,571	88.1	
Celery	749	1.2	55,320	89.3	
Spinach	653	1.1	55,973	90.4	
Hay-Alfalfa	618	1.0	56,591	91.4	
Grapefruit	506	0.8	57,097	92.2	
Polo Fields	504	0.8	57,601	93.0	
Melon-Watermelon	419	0.7	58,020	93.7	
Cabbage	393	0.6	58,413	94.3	
Orange-Tangerine N/B	353	0.6	58,766	94.9	
Potatoes	337	0.5	59,103	95.4	
Squash	334	0.5	59,437	96.0	
Kale	322	0.5	59,759	96.5	
Tomatoes	282	0.5	60,041	96.9	
Misc. - Fish Farm	265	0.4	60,306	97.4	
Onion - Green	191	0.3	60,497	97.7	
Sugar Beets	187	0.3	60,684	98.0	
Radish	179	0.3	60,863	98.3	
Nursery-Plants	179	0.3	61,042	98.6	
Eggplant	148	0.2	61,190	98.8	
Fig	138	0.2	61,328	99.0	
Mangoes	117	0.2	61,445	99.2	
Chili Peppers	106	0.2	61,551	99.4	
Olives	86	0.1	61,637	99.5	
Misc. Fruit	77	0.1	61,714	99.6	
Bokchoy	60	0.1	61,774	99.7	
Hay-Sudan	48	0.1	61,822	99.8	
Peaches N/B	40	0.1	61,862	99.9	
Melon-Honeydew	22	0.0	61,884	99.9	
Pasture	21	0.0	61,905	100.0	
Peaches/Strawberries	28	0.0	61,933	100.0	
	61,933	100.0			

NOTE: The Top 7 crops by acreage are also the Top 7 crops by value and accounts for 59% of the accumulated acreage.

FIGURE 3: 5-Year History of Crops by Value

Crop Description	2014	2015	2016	2017	2018
Grapes	$131,852,825	$156,300,300	$145,993,515	$133,659,918	$109,391,868
Dates	$36,184,900	$41,383,440	$40,138,560	$50,136,000	$77,859,000
Bell Peppers	$87,891,750	$119,680,501	$77,733,600	$74,192,512	$67,866,593
Lemon-Lime	$93,824,406	$104,388,255	$83,531,814	$63,253,079	$50,927,746
Golf Course Turf	$80,128,574	$57,366,501	$49,219,329	$51,129,219	$49,098,771
Carrots	$21,756,480	$27,203,400	$28,632,144	$30,405,510	$25,651,500
Lettuce	$28,023,774	$28,344,615	$25,092,600	$25,207,326	$23,904,664
Cauliflower	$8,114,400	$10,151,659	$10,981,750	$10,470,250	$18,291,989
Nursery-Trees	$27,778,740	$26,971,420	$18,357,072	$18,953,334	$17,104,784
Celery	$8,835,750	$6,891,891	$8,073,405	$7,854,432	$11,542,839
Top Ten Crops	**$524,391,599**	**$578,681,982**	**$487,753,789**	**$465,261,580**	**$451,639,754**
Other Crops	$206,095,628	$165,627,316	$141,792,144	$138,721,513	$134,076,135
All Crops Combined	**$730,487,227**	**$744,309,298**	**$629,545,933**	**$603,983,093**	**$585,715,889**

NOTE: Total crop value has declined 21% from 2015 to 2018 and the Top 10 crops have declined by 22% for the same period. Top 10 crops are a major driving force and gauge for all crop activity.

Artichokes

Okra

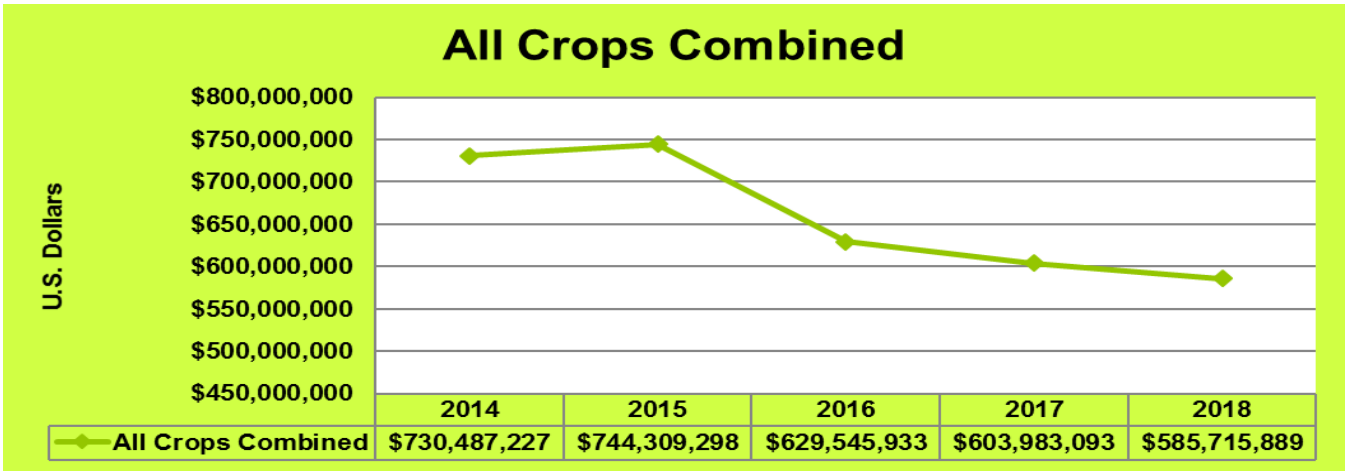
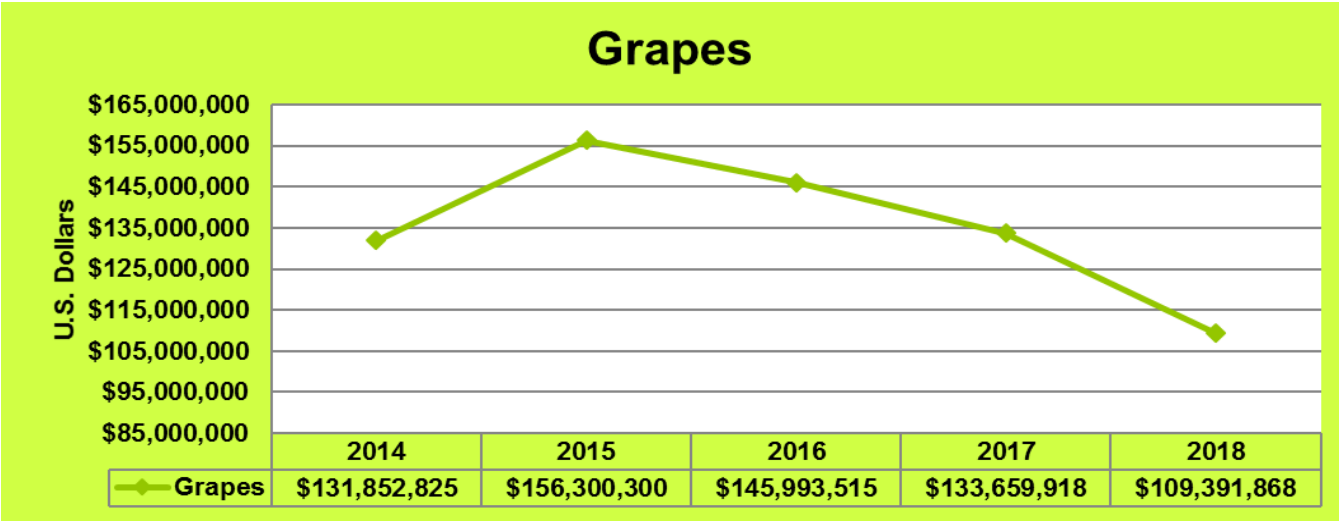


FIGURE 4: Trend shows steady decrease in crop value since 2015. * Total Gross Production

FIGURE 5: Historical Crop Value



NOTE: Grape crop values show a steady downward trend of 30% from 2015 to 2018.

Grapes

Date Palms

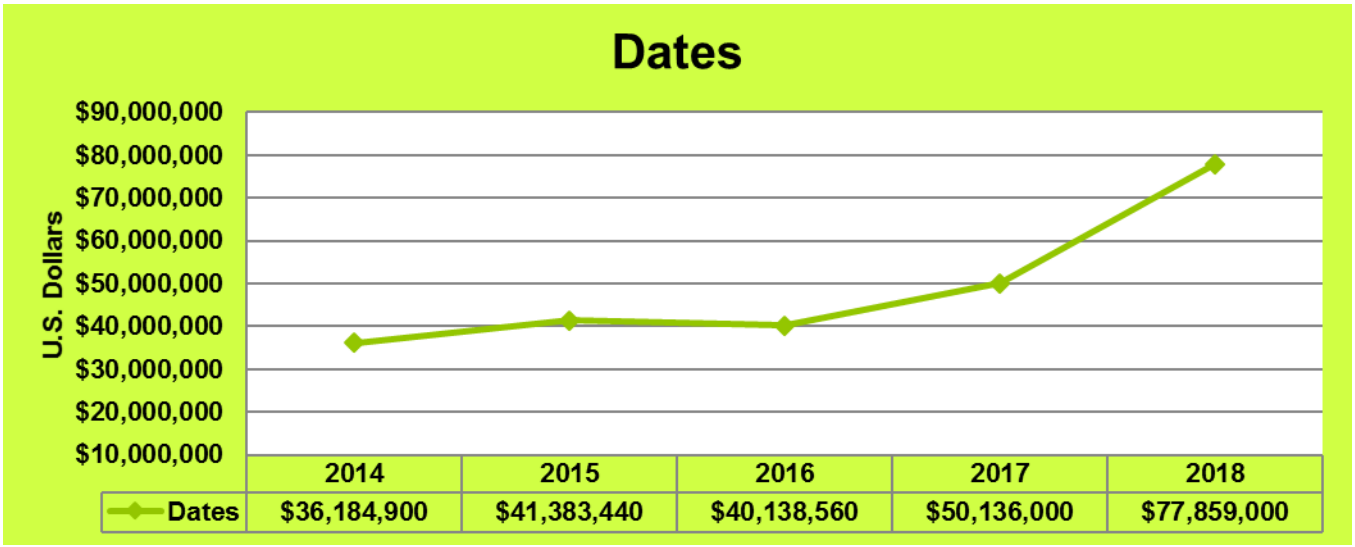


FIGURE 6: Date crops increased in value by 88.1% from 2015 to 2018.

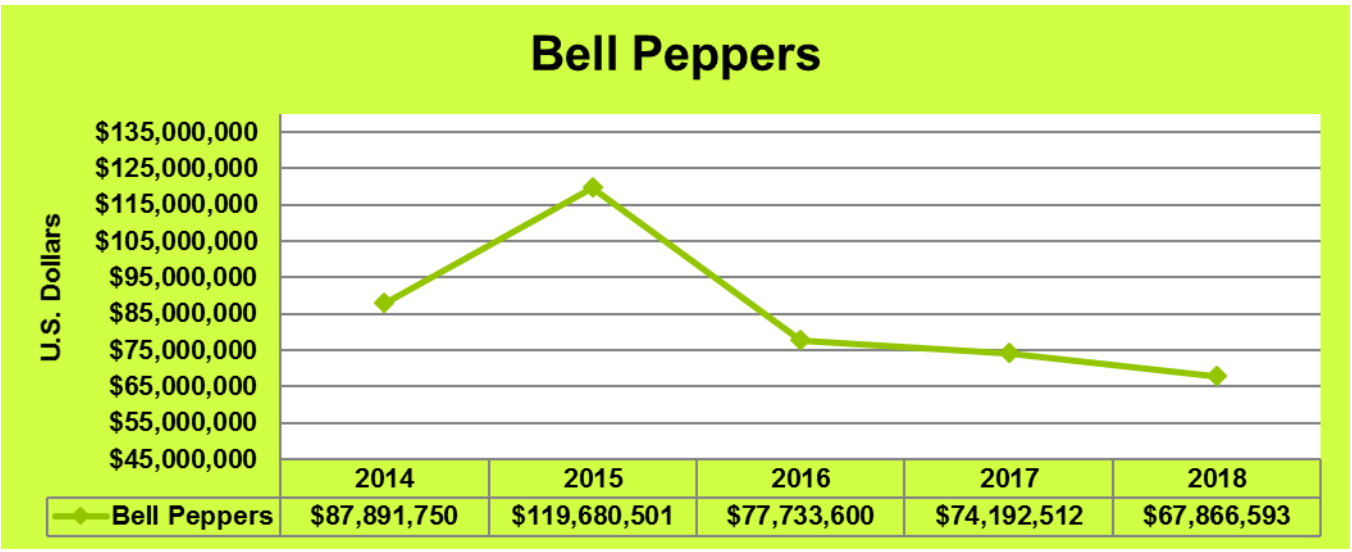


FIGURE 7: After a jump in 2015, bell pepper value remains relatively flat.

Bell Pepper

Lemons

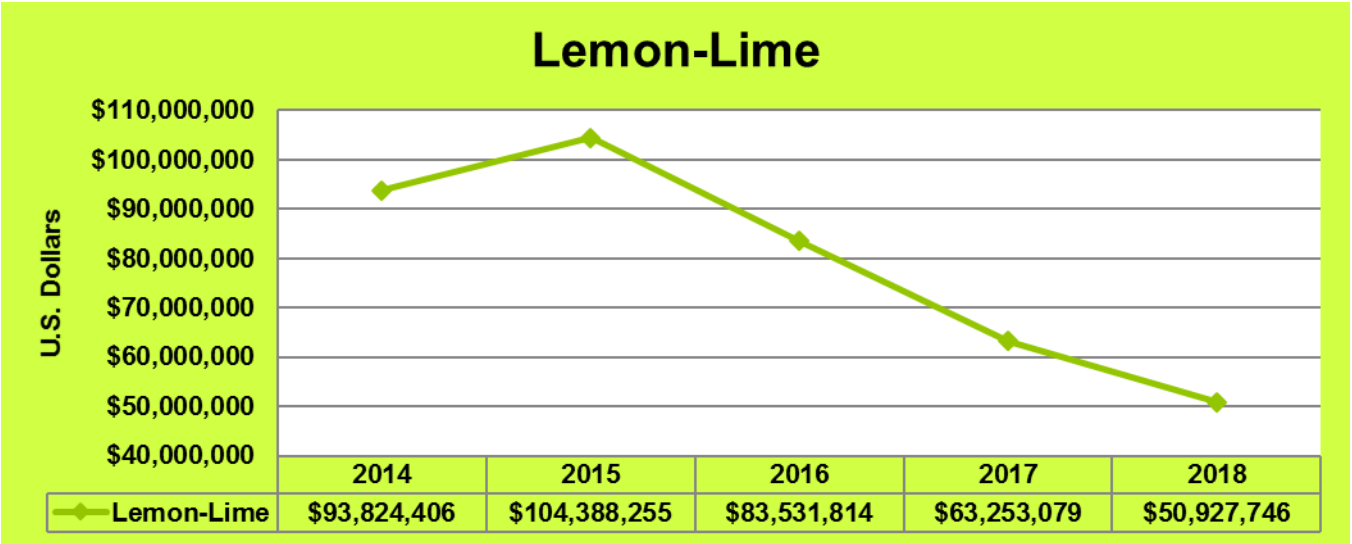


FIGURE 8: Lemon-lime crop values have declined 51.2% from 2015 to 2018.

FIGURE 9: After declining 38.6% from 2014 to 2016, golf course turf values remained steady from 2016 to 2018.

Golf Course

Carrot Field

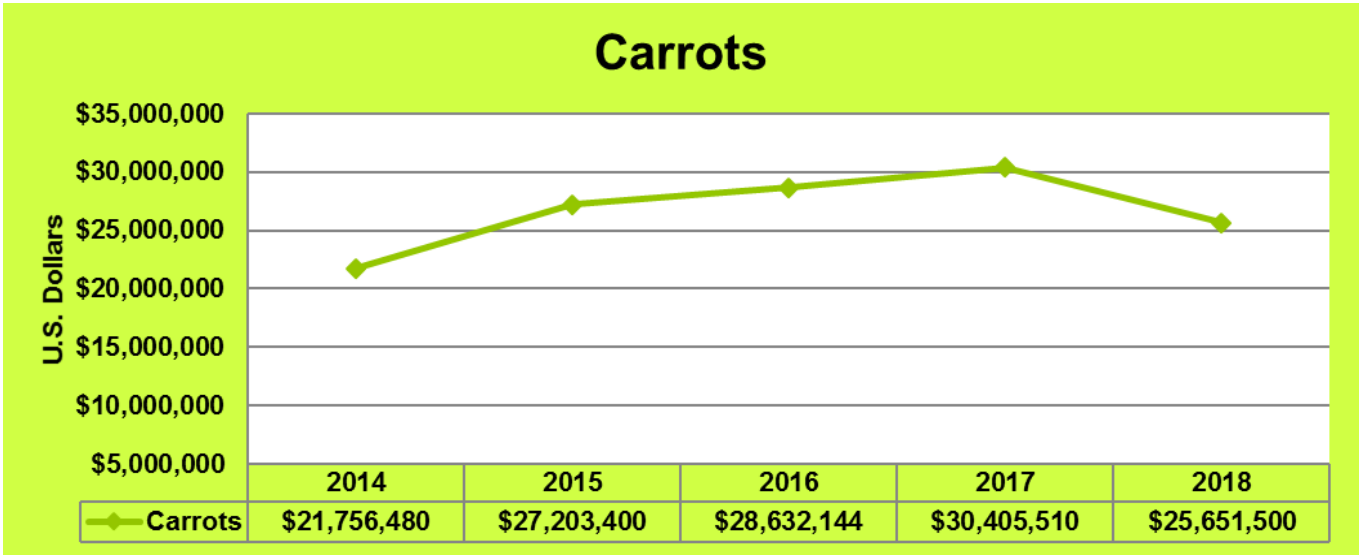


FIGURE 10: After increasing 39.8% from 2014 to 2017, carrot values have remained relatively level.

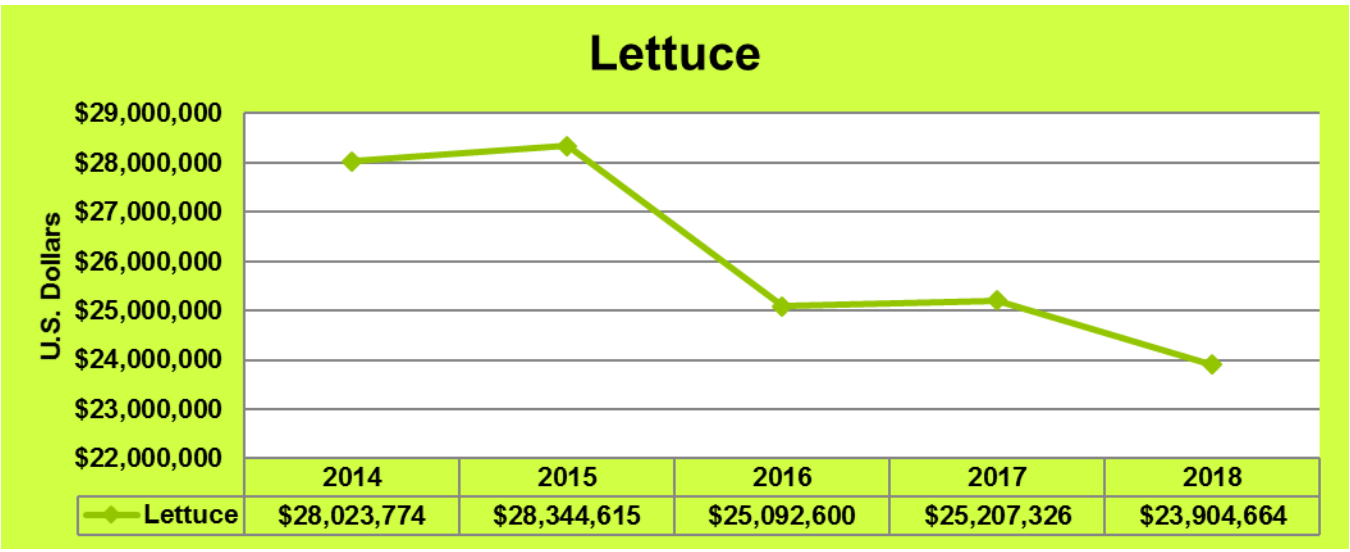


FIGURE 11: Lettuce values dropped 11.5% from 2015 to 2016, followed by a decrease of 5.2% from 2017 to 2018.

Lettuce

Cauliflower

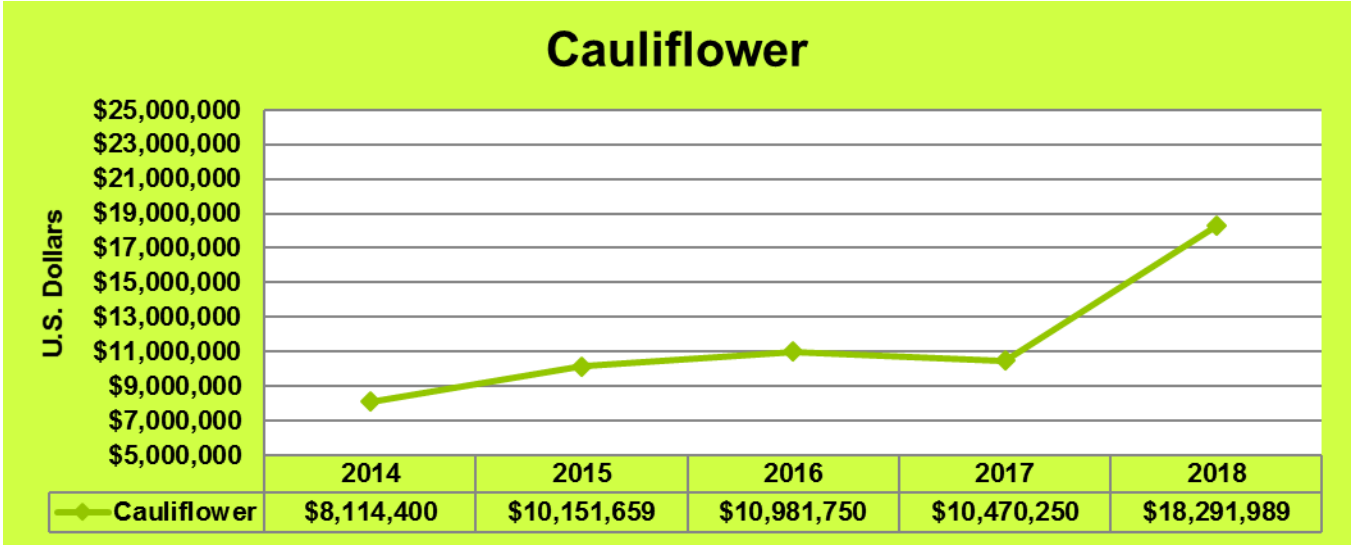


FIGURE 12: Cauliflower values have jumped 74.7% from 2017 to 2018.

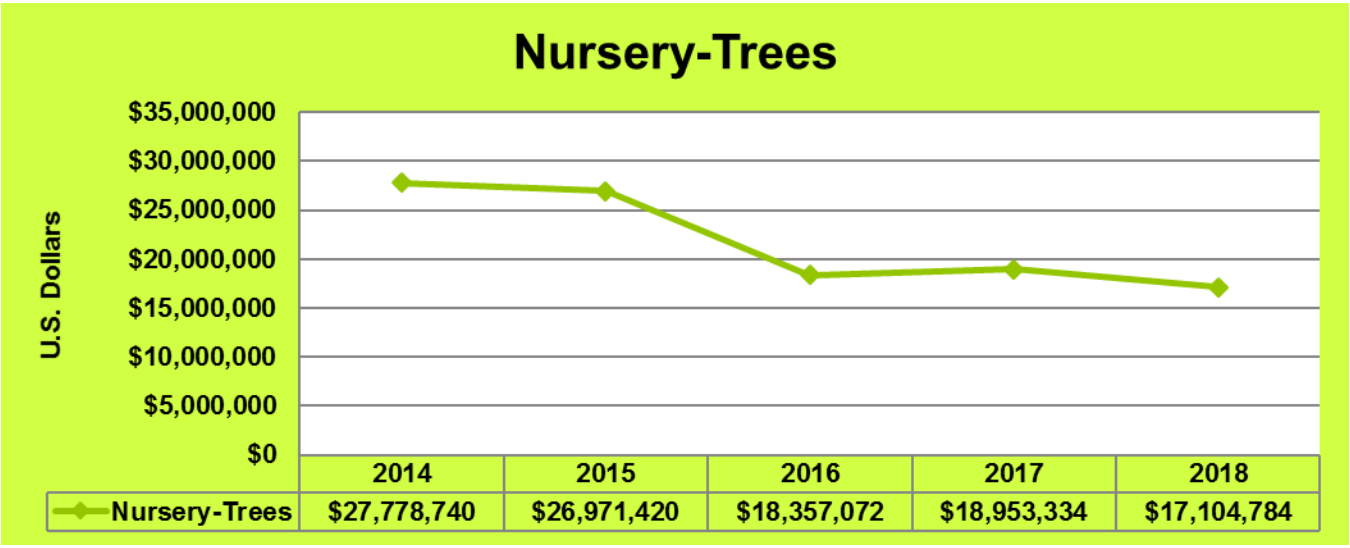


FIGURE 13: After a 31.9% decline from 2015 to 2016, nursery tree values were steady from 2016 to 2018.

Palo Verde Trees in Nursery

Celery Field

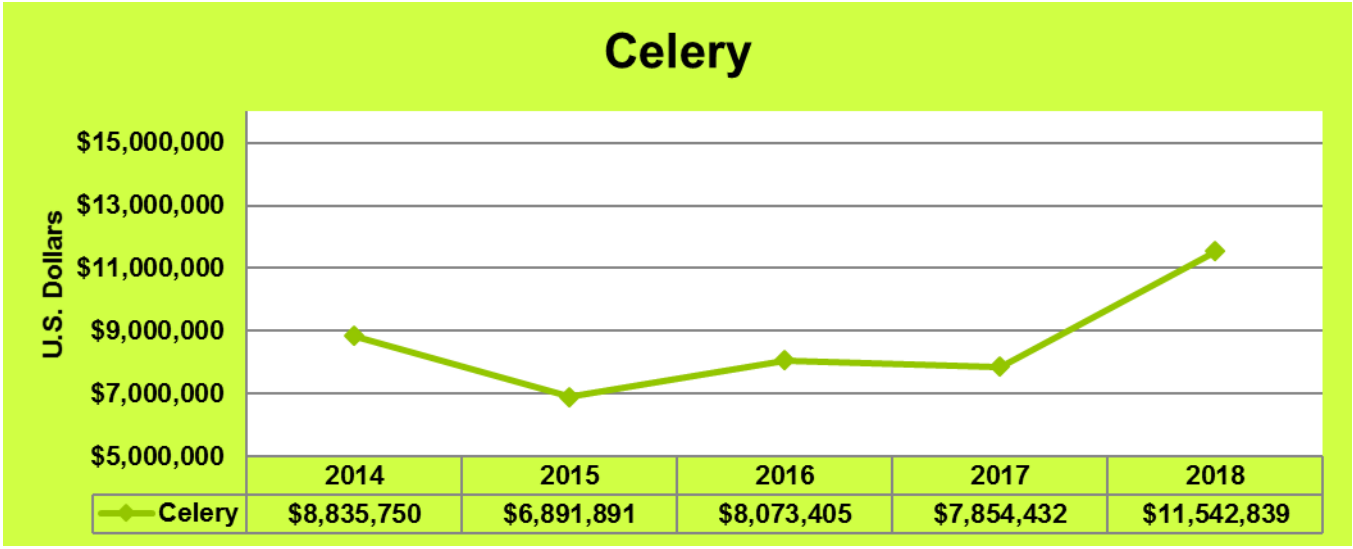


FIGURE 14: Celery values jumped 47% from 2017 to 2018.

FIGURE 15: 5-Year History of Crops by Acreage

Crop Description	2014	2015	2016	2017	2018
Dates	7,765	8,211	7,964	8,356	8,651
Grapes	7,802	7,592	7,379	7,129	6,283
Golf Course Turf	6,007	6,043	6,043	6,043	6,043
Carrots	3,930	4,572	4,777	5,927	4,886
Lemon-Lime	3,887	3,902	3,927	4,111	4,339
Bell Peppers	4,490	5,044	5,288	4,506	3,479
Lettuce	3,234	2,930	3,217	3,240	3,071
Sweet Corn	1,259	1,279	1,883	1,299	1,843
Dates - N/B	1,602	1,878	2,170	1,633	1,525
Oriental Vegetables	2,112	1,838	1,050	1,639	1,437
Top Ten Crops	**42,088**	**43,289**	**43,698**	**43,883**	**41,557**
Other Crops	24,343	23,318	22,919	22,163	20,376
All Crops Combined	**66,431**	**66,607**	**66,617**	**66,046**	**61,933**

NOTE: Total acreage was steady 2014 to 2016 followed by a drop of 571 acres in 2017 and 4,113 acres in 2018. The Top 10 crops declined by 5% in 2018, which indicates that the Top 10 crops are a major driving force and gauge for all crop activity.

Basil

Mangoes

Bok Choy

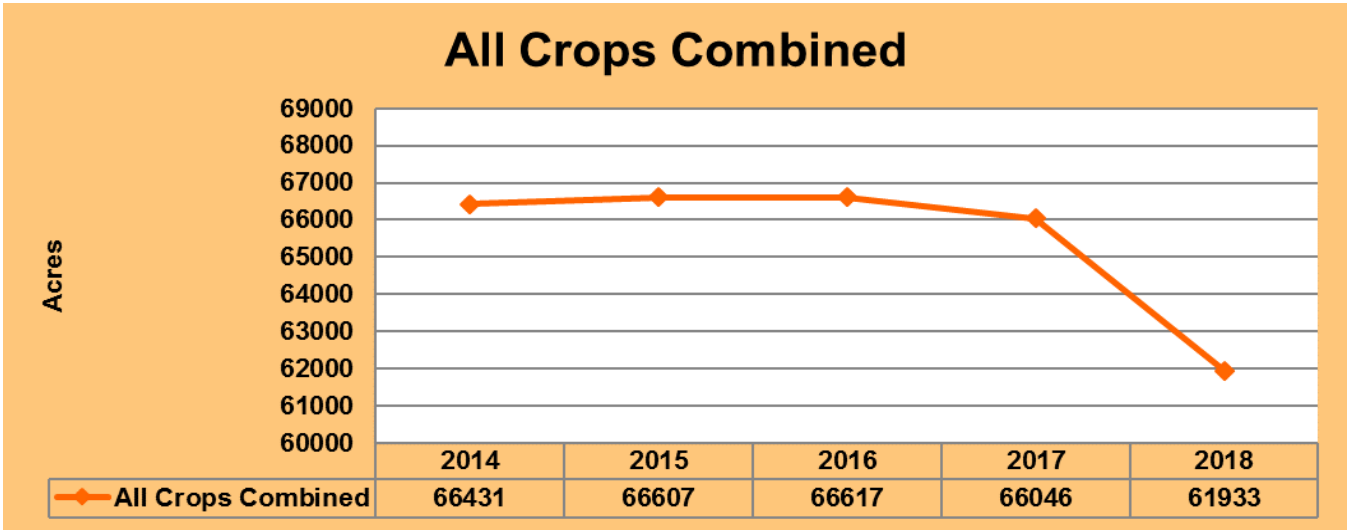
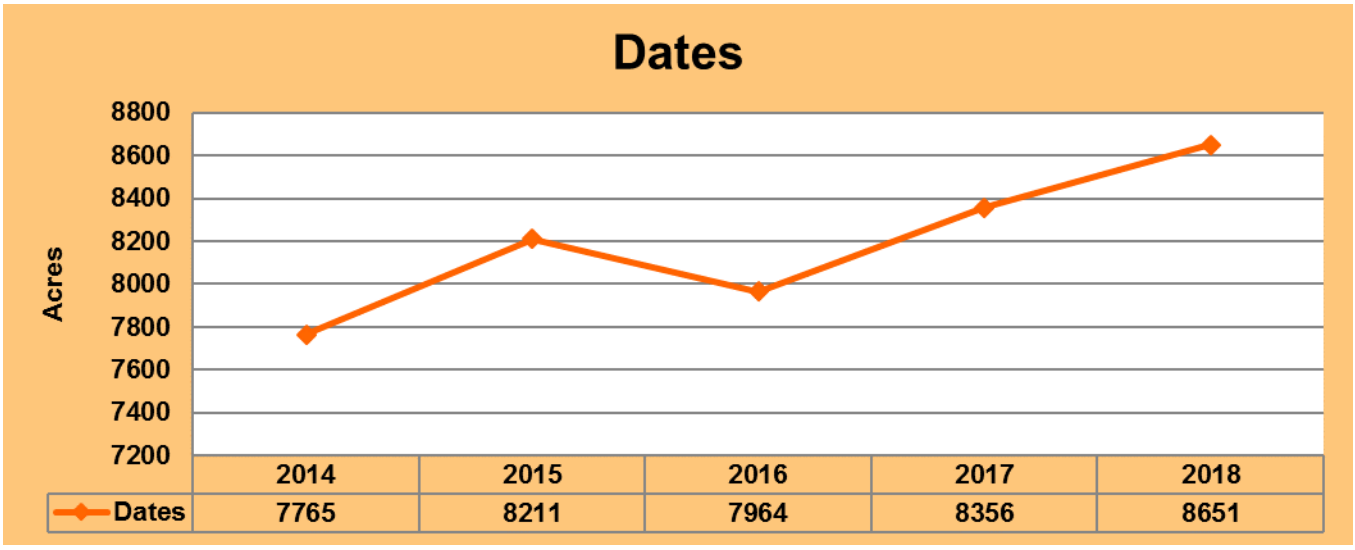


FIGURE 16: 0.9% decrease (571 acres) from 2016 to 2017 followed by a 6.2% drop (4113 acres) from 2017 to 2018.

FIGURE 17: Historical Crop Acreage



NOTE: Date palm acreage has risen 687 acres (8.6%) from 2016 to 2018.

Date Palms

Grapes

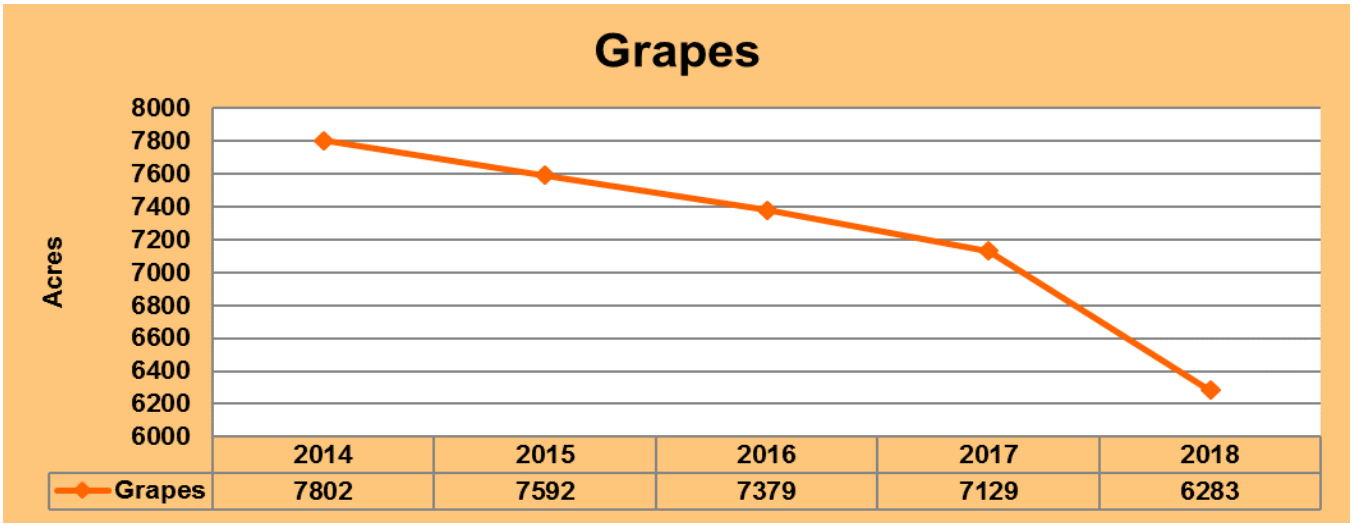


FIGURE 18: Grape acreage continues to decline, 19.5% less from 2014 to 2018.

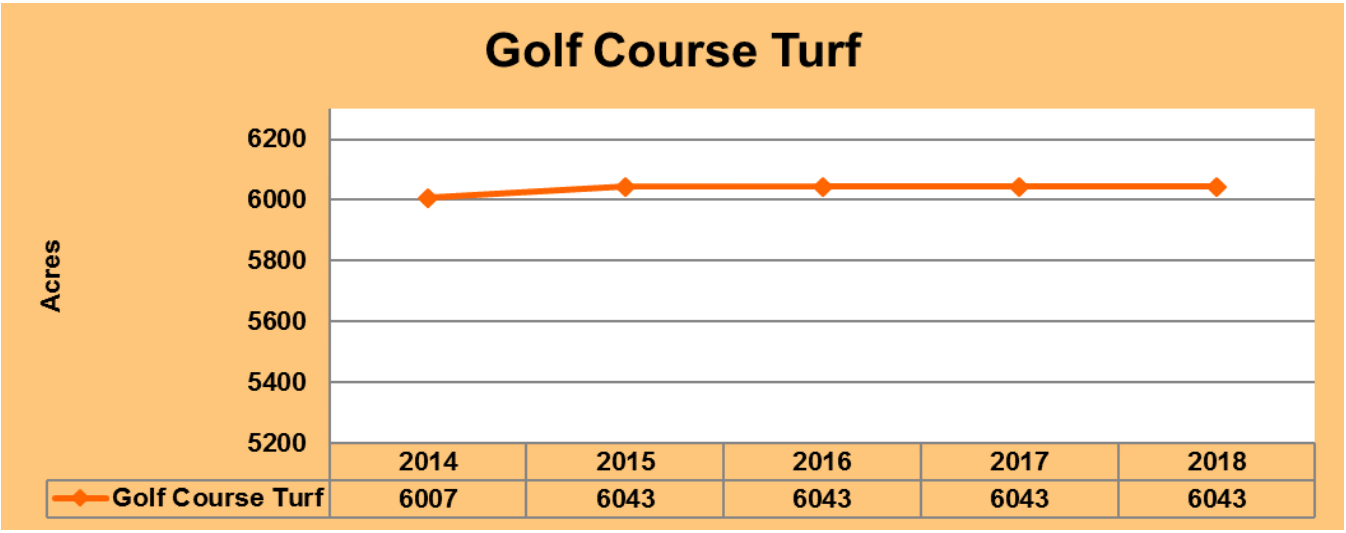


FIGURE 19: Golf course turf acreage has been holding very steady.

Golf Course

Carrots

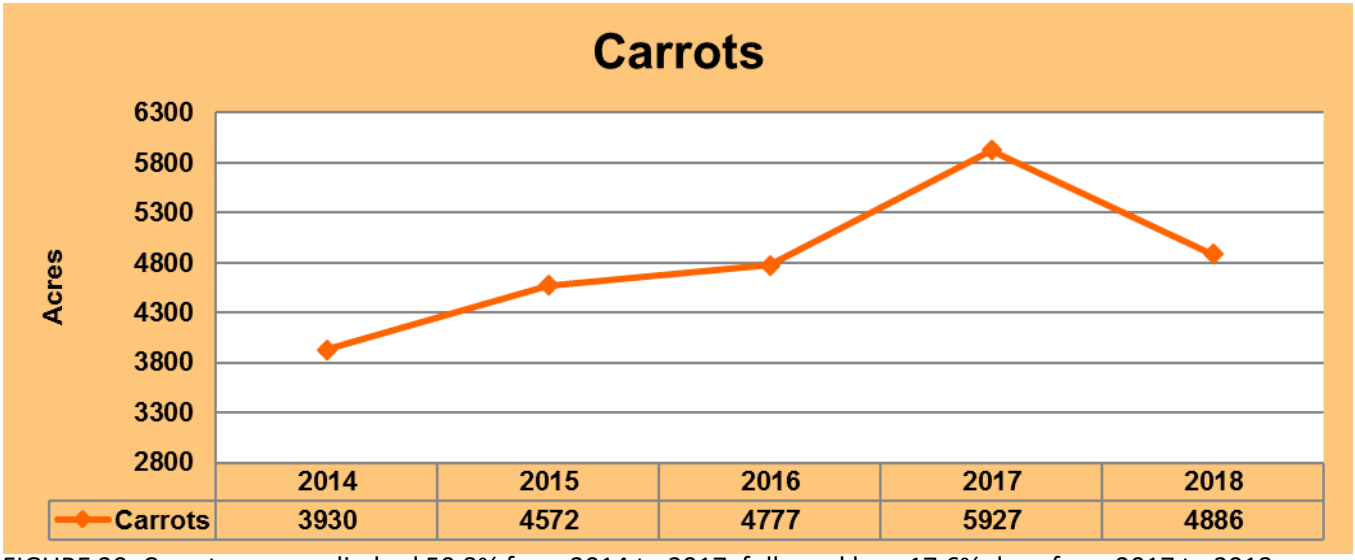


FIGURE 20: Carrot acreage climbed 50.8% from 2014 to 2017, followed by a 17.6% drop from 2017 to 2018.

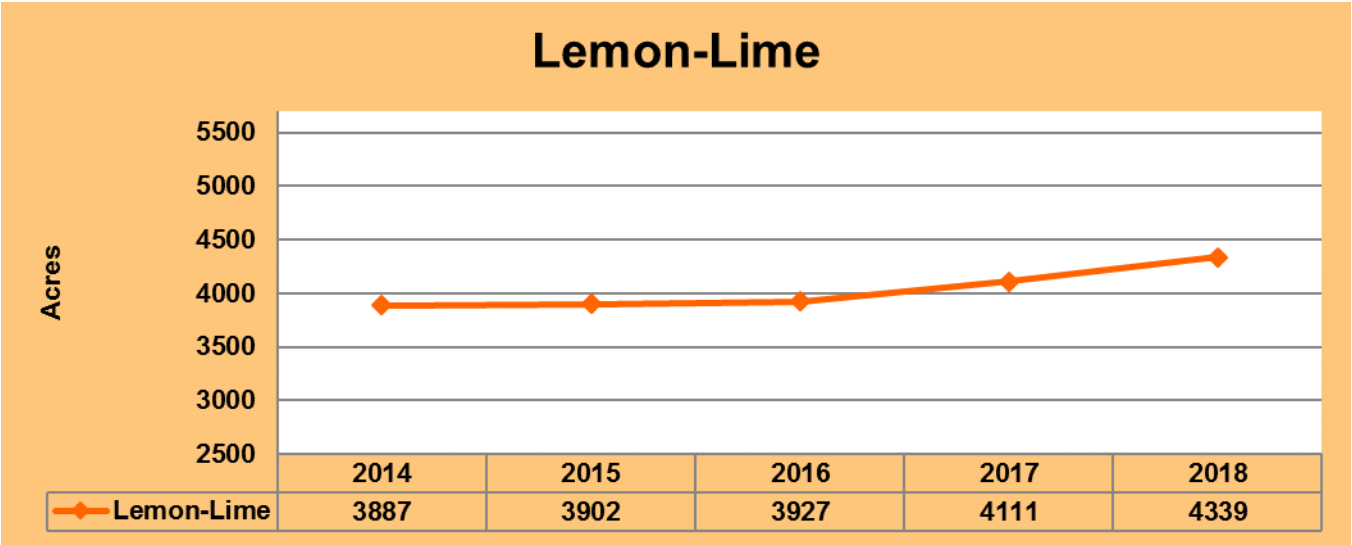


Figure 21: Lemon-lime acreage has remained relatively flat this year.

Lemons

Bell Pepper Seedlings

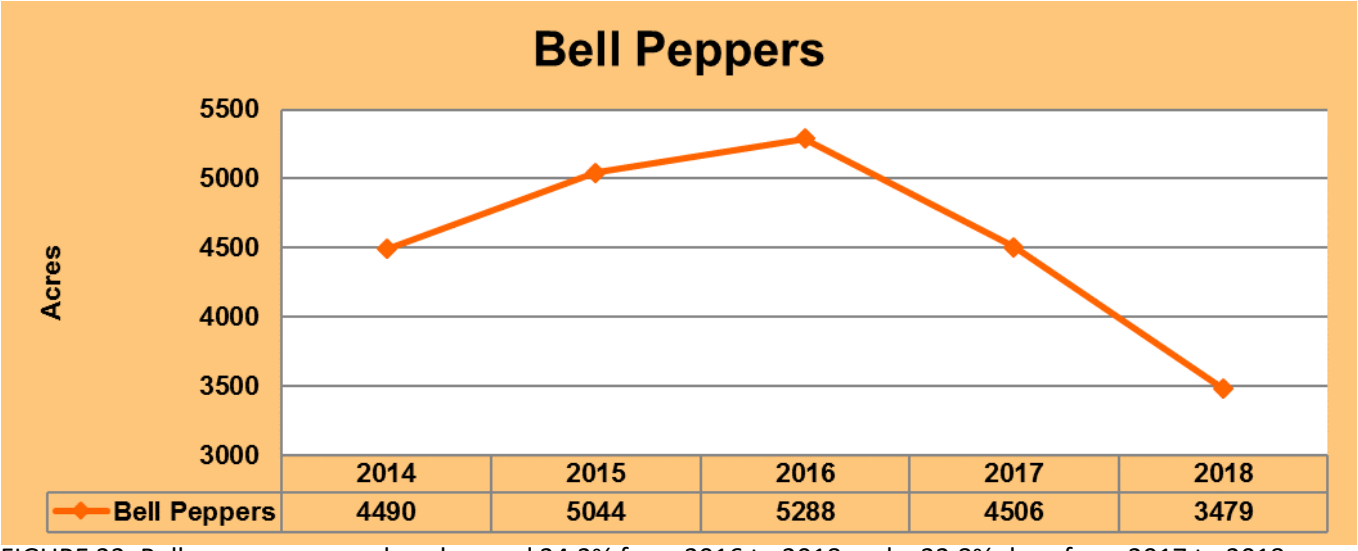


FIGURE 22: Bell pepper acreage has dropped 34.2% from 2016 to 2018 and a 22.8% drop from 2017 to 2018.

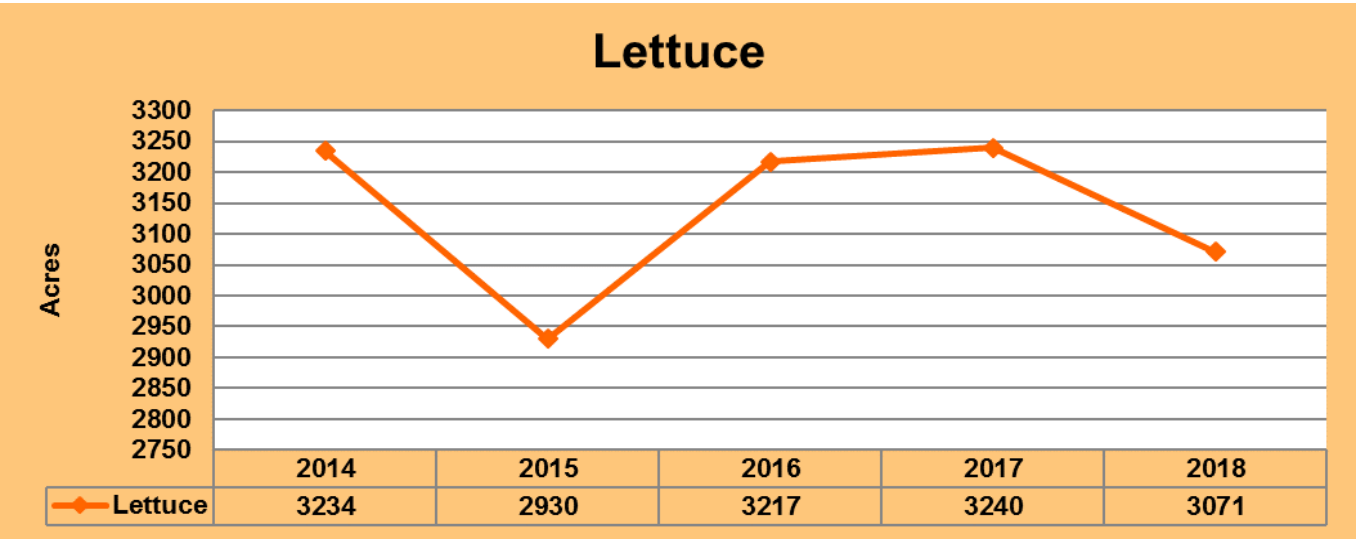


FIGURE 23: Lettuce acreage dipped 9.4% in 2015 and rebounded in 2016, followed by a 5.2% dip in 2018.

Rows of Lettuce

Sweet Corn

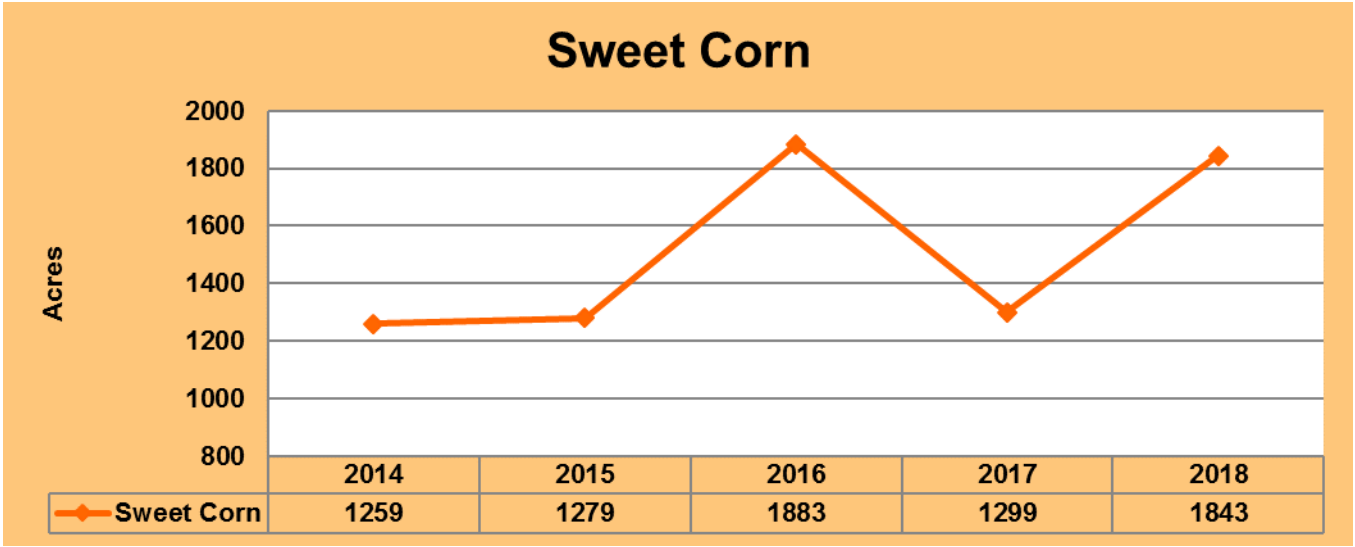


FIGURE 24: Sweet corn acreage jumped 47.2% in 2016, followed by a dip 2017 and rebound in 2018.

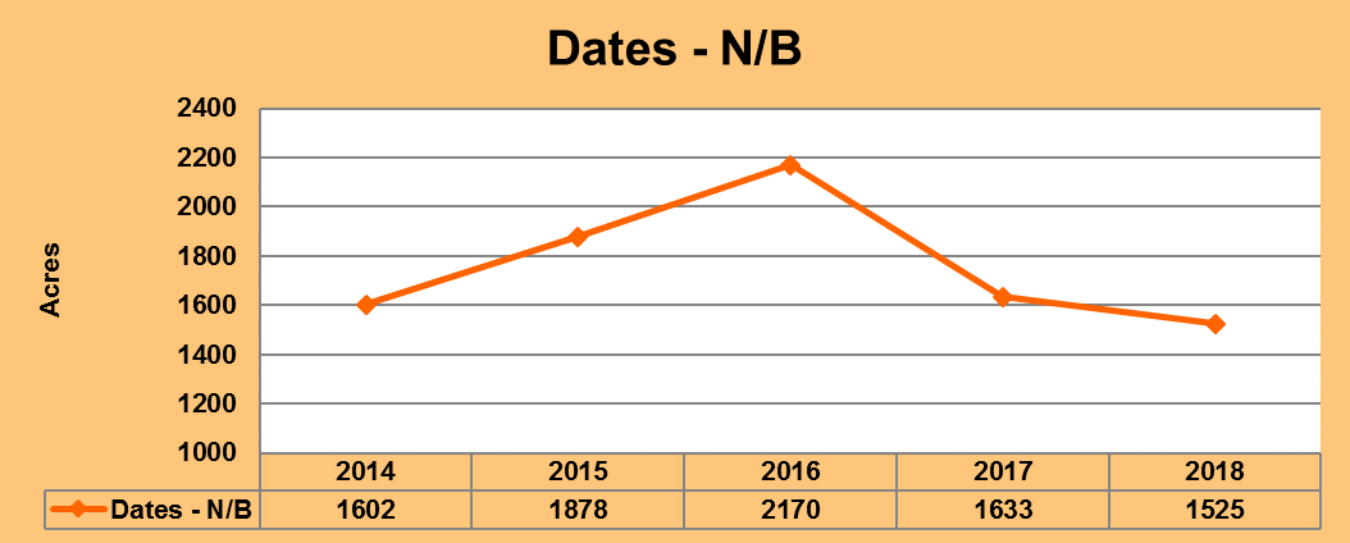


FIGURE 25: Non-bearing date acreage declined 29.7% from 2016 to 2018.

Date Palm Shoots

Bok Choy

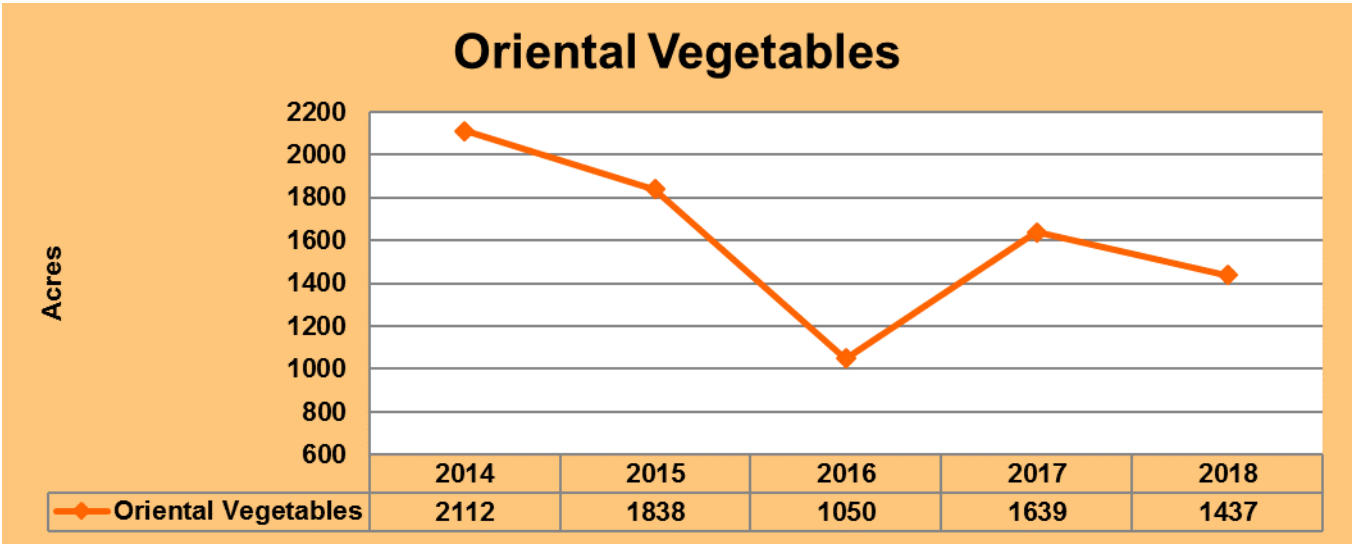
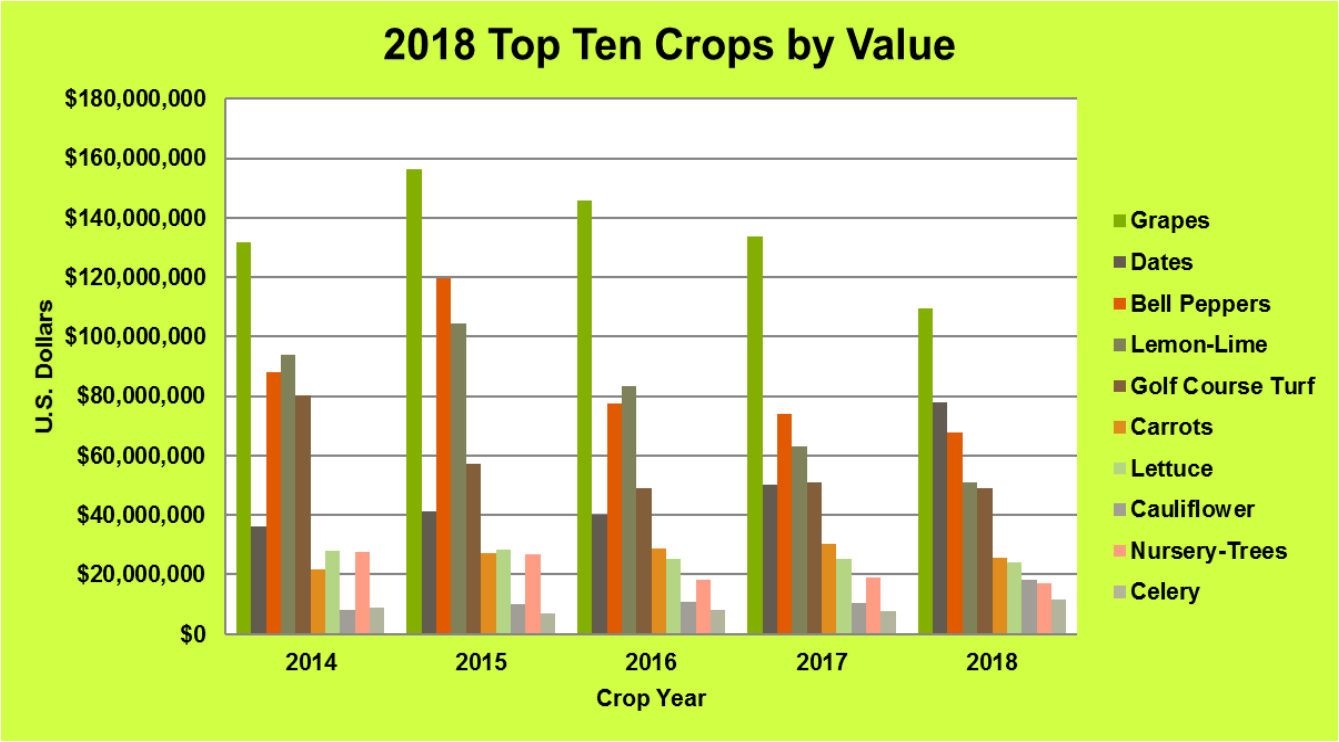


FIGURE 26: Oriental vegetable acreage looks to be trending upwards. Acreage is up 36.9% from 2016 to 2018.

FIGURE 27: Top 10 Charts - Value & Acreage



NOTE: Grapes (18.2%), Bell Peppers (8.5%), Lemon-Lime (19.5%), and Carrots (15.6%) show a substantial, downward trend in values, while Dates (55.3%), Cauliflower (74.7%), and Celery (47%) show increases for 2018.

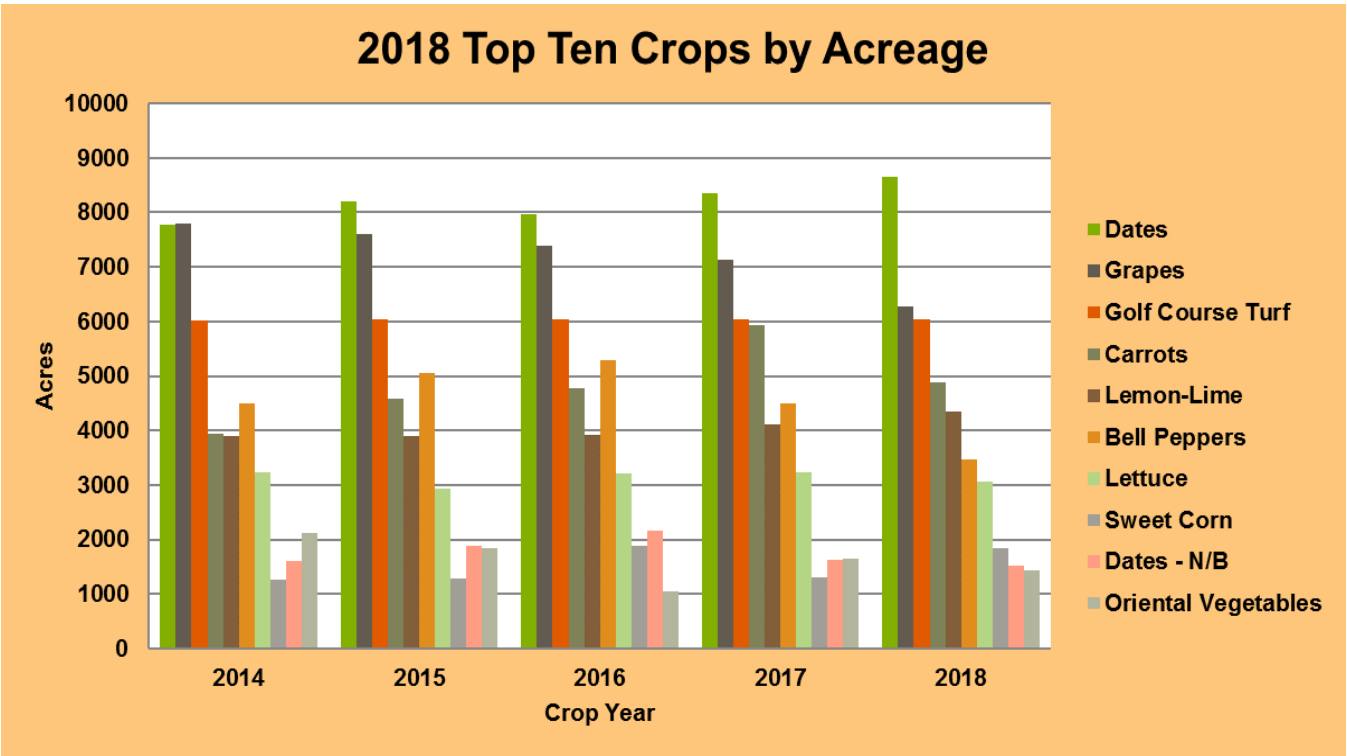
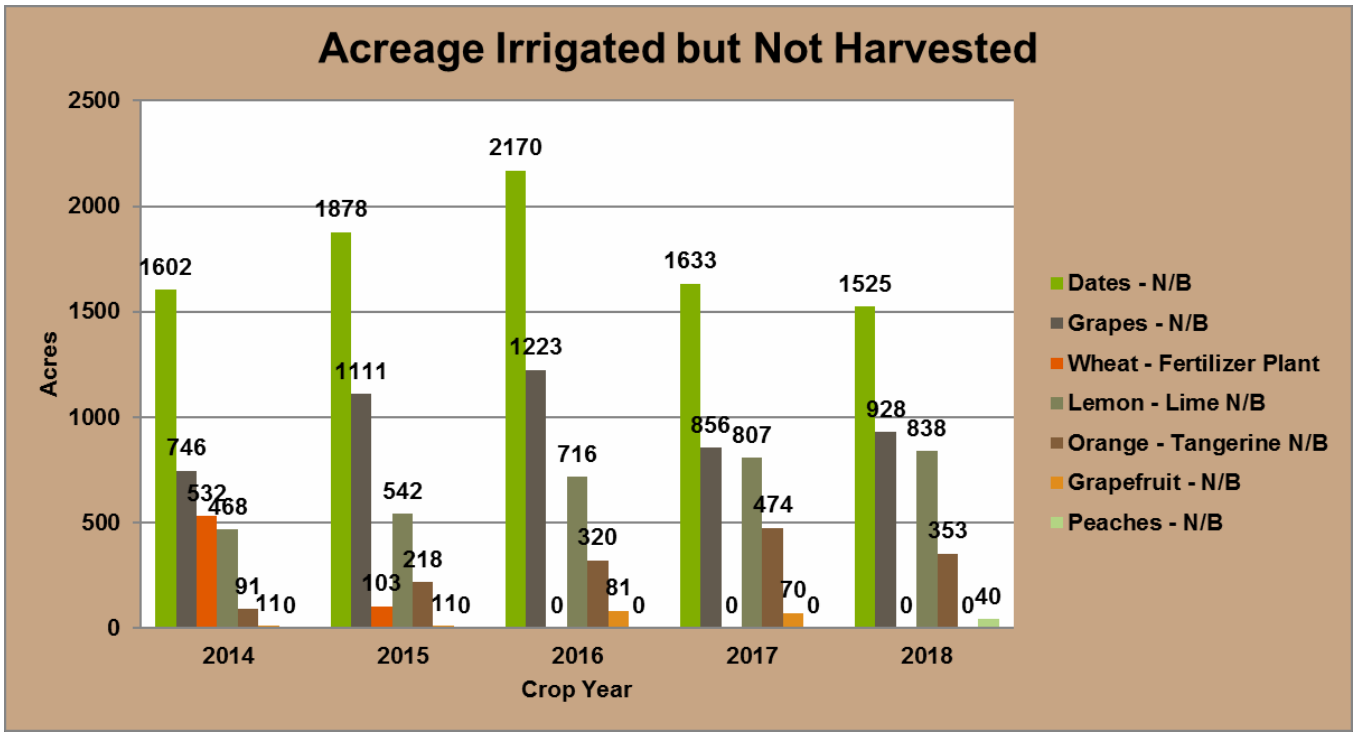


FIGURE 28: Bell Peppers (22.8%), Carrots (17.6%), and Grapes (11.9%) show a substantial drop in acreage, while Dates (3.5%) and Lemon-Lime (5.5%) show modest increases for 2018. Sweet Corn (41.9%) is the largest increase.

FIGURE 29: Acreage Irrigated - Not Harvested



NOTE: “N/B” for “non-bearing”. Chart shows decrease in non-bearing date acreage from 2016 to 2018.

Crop Acreage by Irrigation Method

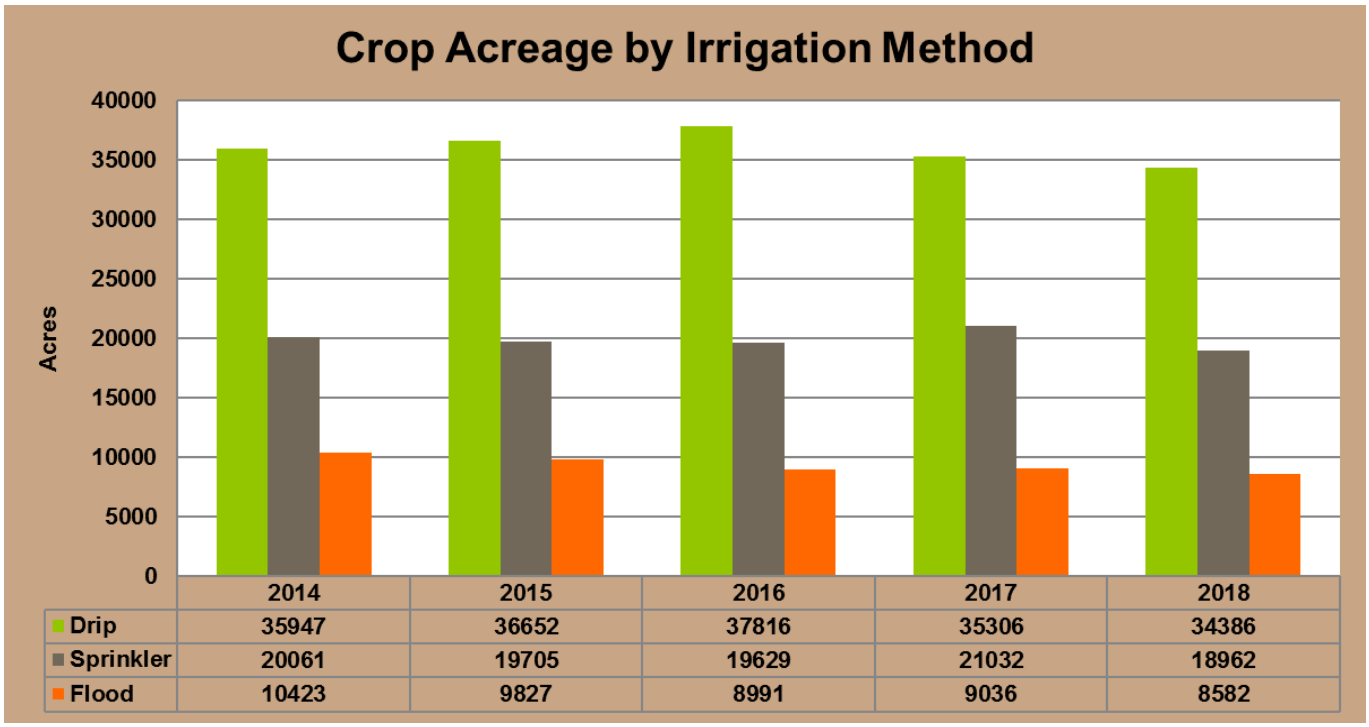
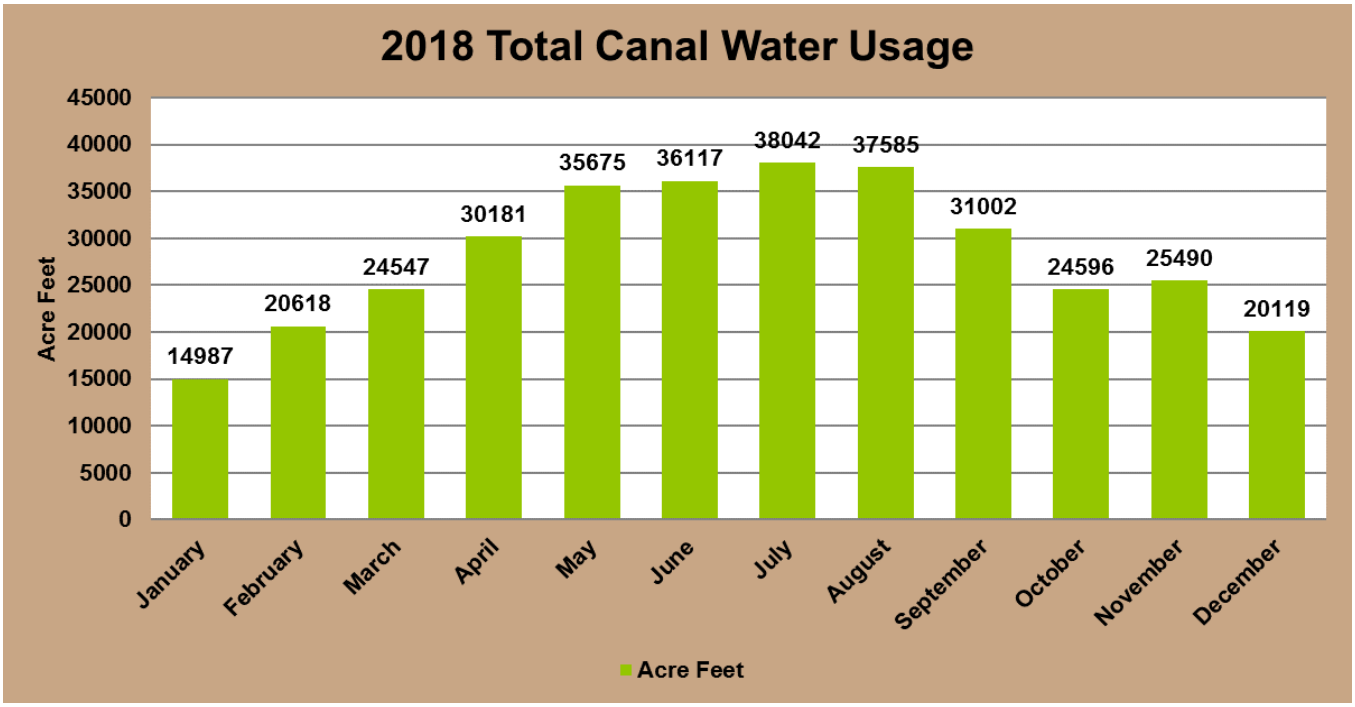


FIGURE 30: Chart shows a 17.7% decrease from 2014 to 2018 in acres of flood irrigation.

FIGURE 31: Canal Water Consumption



NOTE: Chart shows seasonal variation in canal water usage. July 2018 was 154% higher than January 2018.

Coachella Canal

Appendix

2018 Irrigation Method Map

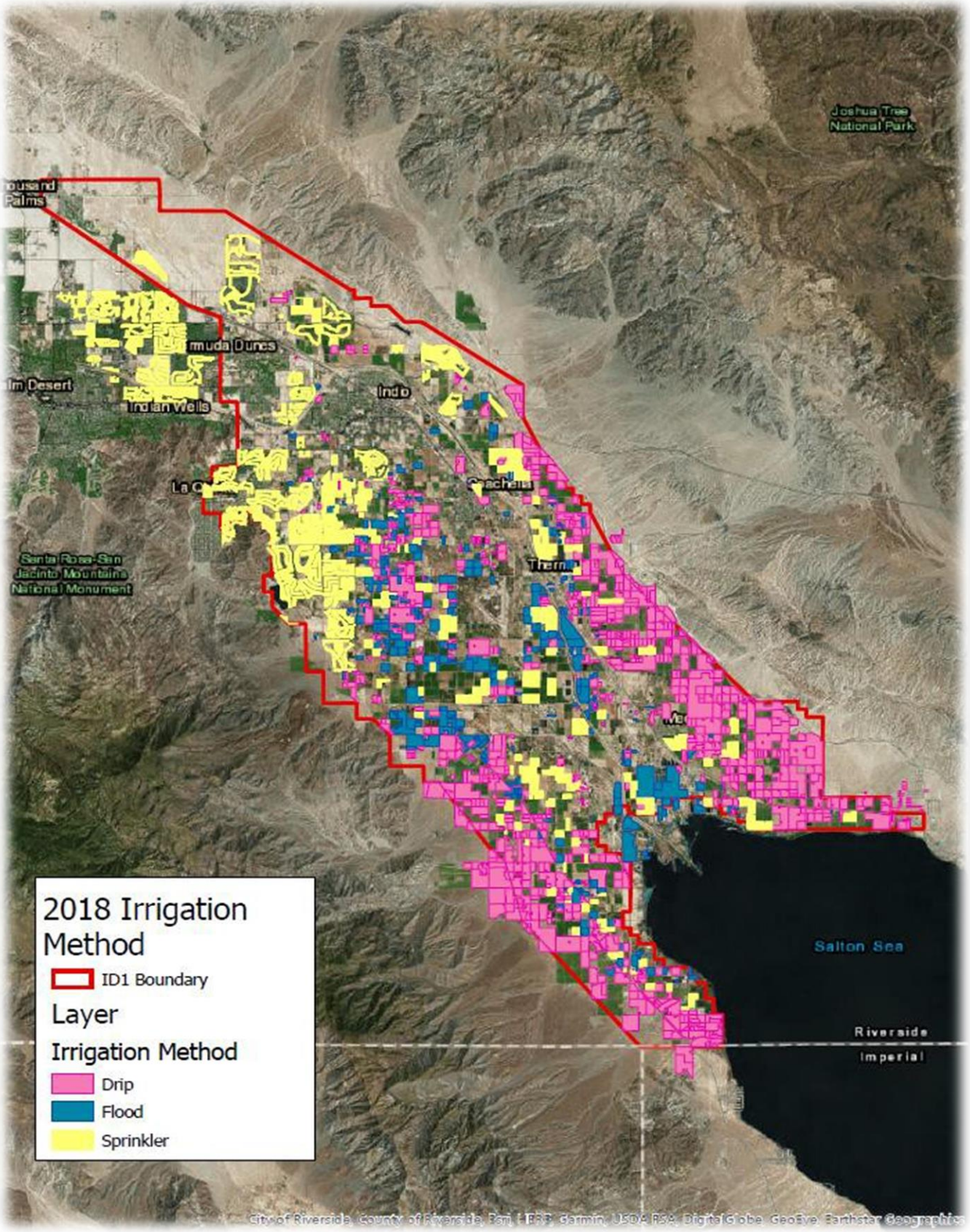


FIGURE 32: Color-coded map indicates differences in irrigation method by area.

United States Bureau of Reclamation (USBR) Crop and Water Data Report

Explanation of Data found in Report

The 2018 United States Bureau of Reclamation (USBR) Crop and Water Data, Form 7-2045 (CVWD Form 972), represent the crop types, crop acreages, estimated crop yield, irrigation method and irrigation water distributed to customers within the Coachella Valley Water District (CVWD) service area and Improvement District 1 (ID1). This report represents only imported Colorado River water and not groundwater production within CVWD's service area.

Sections I and II include the total district acres (inside ID1), irrigable acres, commercial acres, non-commercial acres, multiple-cropped acres, acres irrigated, acres irrigated but not harvested, and idle/fallow acreage. The irrigable acres are calculated using GIS mapping technology and field verified three times per year by CVWD staff.

Section III includes the crop type, crop acreage, and yields per acre and total yields per ton. CVWD staff calculate the crop type and crop acreage with a GIS mapping software and through a field verification process. The crop yield and value data is obtained from the County of Riverside Agricultural Commissioner's Office.

Section IV includes monthly water distribution, data includes all Colorado River Water Supply, Operational Spills, Transportation Losses, Non-Agricultural Deliveries (M&I, Wildlife, Misc.), and Water Delivered to Farms.

The monthly water delivered section includes all Colorado River water that is conveyed through the Coachella Canal and sold to CVWD customers. The accounting of this water includes water exported outside of ID1 for Golf Course Use and Groundwater Replenishment. The water used outside of ID1 data is located in the Non-Agricultural Deliveries (M&I, Wildlife, Misc.) columns of form 7-2045. The described uses of this water can be further broken down by:

1. M&I: Construction Water and East Valley Groundwater Replenishment
2. Wildlife: Water to Dos Palmas Reserve and Wildlife Drinkers
3. Miscellaneous: Golf Courses including the Mid-Valley Pipeline, Hunting Clubs, Polo Fields, and Fish Farms

All published data on groundwater production collected by CVWD is in the Engineer's Report on Water Supply and Replenishment Assessment 2018-2019. You can reference this report in its entirety on the CVWD website, www.cvwd.org.

COACHELLA VALLEY WATER DISTRICT
Service Department - Zanjero Section
CROP AND WATER DATA
Year 2018

Making every drop count...
Since 1918

SECTION I - DISTRICT INFORMATION

a. Region **LC**	b. IDCON **304560**	c. Cong. Dist. **36th**	d. Project: **Boulder Canyon Project**	e. Division: **Coachella Division**	
f. Unit: **NA**	g. Water District: **Coachella Valley Water District**		h. State: **CA**	I. Counties: **Riverside**	
j. Total District Acres**:** **137,416**	k. Irrigable Acres: **76,364**		l. Contact Person: **Eric Morales**	m. Telephone: **(760)398-2661 Ext. 2629**	

SECTION II - DISTRICT LANDS IN AN IRRIGATION ROTATION

a. Type of Service (mark one): [x] Full [ ] Supplemental [ ] Temporary

b. Commercial Acres **52,920**

c. Non-commercial **2,011**

d. Multi-cropped Acres **5,329**

e. Acres irrigated by: Sprinkler: **18,962** Drip **34,386** Flood: **8,582**

f. Acres irrigated but not harvested **3,684**

g. Acres not irrigated: [ ] Dry Cropped [x] Fallow **9,659** [x] Idle **8,090**

h. Permanent Urbanization & Raw Land Acres: **51,052**

SECTION III - CROP PRODUCTION

a. CROPS	b. ACRES	c. UNIT	d. IELD PER ACRE	d. IELD TOTAL	a. CROPS	b. ACRES	c. UNIT	d. IELD PER ACRE	d. IELD TOTAL
CEREALS									
50 Barley (malt)	0	Bu	0.00	0	54 Rice	0	Cwt	0	0
51 Barley (feed)	0	Bu	0.00	0	56 Sorghums (sorgo, kaffir, milo, ect.)	0	Cwt	0	0
52 Corn	0	Bu	0.00	0	57 Wheat	0	Bu	0.00	0
53 Oats	0	Bu	0.00	0	58 Other Cereals (specify)	0	Bu	0	0
FORAGE									
61 Alfalfa hay	618	Ton	8.0	4,944.0	Sillage (sorgo, kaffir, milo, etc.)	0	Ton	0	0
62 Other hay (Sudan) *Fertilizer	48	Ton	0.0	0.0	Other forage (specify)	0	Ton	0	0
63 Irrigated pasture	1,400	AUM	1.00	1,400.0					
MISCELLANEOUS FIELD CROPS									
81 Beans, dry and edible	0	Cwt	0	0	86 Hops	0	Lb	0	0
82 Cotton: Lint (Upland)	0	Lb	0	0	87 Mints	0	Lb	0	0
83 Cotton: Seed (Upland)		Ton	0	0	90 Soybeans	0	Bu	0	0
84 Cotton: Lint (American-Pima)	0	Lb	0	0	89 Sugar beets	187	Ton	168	31,416
85 Cotton: Seed (American-Pima)		Ton	0	0	91 Other field crops (specify) polo, turf, golf course	7,586	Ton	315	796,530
VEGETABLES									
101 Asparagus	0	Cwt	0.00	0	117 Onions, dry	0	Cwt	0.00	0
102 Beans, (processing)	0	Ton	0	0	118 Onions, green	191	Ton	6.30	1,203
103 Beans, (fresh market)	857	Ton	1.86	1,594	119 Peas, green(processing)	0	Cwt	0	0
104 Broccoli	981	Ton	1.59	1,560	120 Peas, green (fresh market)	0	Cwt	0.00	0
105 Cabbage	393	Ton	5.00	1,965	121 Peppers (all kinds)	3,585	Ton	6.75	24,199
106 Carrots	4,886	Ton	700.00	3,420,200	122 Potatoes, early	337	Ton	18.65	6,285
107 Cauliflower	1,345	Ton	2.12	2,846	124 Squash	334	Ton	168.00	56,112
108 Celery	749	Ton	19.80	14,830	100 Sweet Potatoes	0	Cwt	0	0
109 Corn, sweet (processing)	0	Cwt	0	0	125 Tomatoes (canning)	0	Ton	0	0
110 Corn, sweet (fresh market)	1,843	Ton	4.82	8,883	126 Tomatoes (fresh market)	282	Ton	4.00	1,128
111 Cucumbers	0	Cwt	0.00	0	127 Other vegetables (specify) artichoke	864	Ton	1.32	1,140
112 Greens, (b.choy spinach, O.veg.etc.)	2,472	Ton	3.88	9,606	Egg plant	148	Ton	2.20	326
113 Lettuce	3,071	Ton	4.90	15,048	Okra	750	Ton	1.29	968
					Radishes	179	Ton	2.63	470
					Spices	1,012	Ton	2.04	2,064

CROP PRODUCTION CONTINUED

	a. CROPS	b. ACRES	c. UNIT	d. YIELD PER ACRE	d. YIELD TOTAL		a. CROPS	b. ACRES	c. UNIT	d. YIELD PER ACRE	d. YIELD TOTAL
NURSERY											
137	Total nursery (show yield in dollars)	1,291		15382.0	19,858,162	138	Fish farm	265	Ton	6.15	1630
						139	Duck ponds	775	Lb	9.65	7479
SEED CROPS											
141	Alfalfa	0	Lb	0	0	146	Onion	0	Cwt	0	0
142	Clover	0	Lb	0	0	147	Pea	0	Cwt	0	0
143	Corn	0	Lb	0	0	148	Potato	0	Cwt	0	0
144	Grass	0	Lb	0	0	149	Sugar beet	0	Cwt	0	0
145	Lettuce	0	Lb	0	0	150	Other seed, (specify)	0	Cwt	0	0
FRUITS											
161	Apples	0	Lb	0	0	165	Grapefruit	506	Ton	4.91	2,486
162	Apricots	0	Ton	0	0	115	Honey Ball, Honeydew, ect.	22	Ton	9.24	203
158	Avocados	0	Ton	0	0	166	Lemons and Limes	4,339	Ton	4.52	19,621
163	Berries,	0	Lb	0	0	171	Olives	86	Ton	4.75	409
114	Cantaloupe	0	Cwt	0	0	167	Oranges and Tangerines	1,113	Ton	8.94	9,950
164	Cherries	0	Ton	0	0	172	Peaches	16	Ton	104.50	1,672
168	Dates	8,651	Ton	3.60	31,144	173	Pears	0	Ton	0	0
159	Figs	138	Ton	0.06	8	174	Prunes and Plums	0	Ton	0	0
169	Grapes, table	6,283	Ton	0.06	366	160	Strawberries	12	Ton	2.64	32
176	Grapes, raisin	0	Ton	0	0	116	Watermelon	419	Ton	560.00	234,640
177	Grapes, wine	0	Ton	0	0	175	Other fruits (specify) Mangoes	117	Ton	0.48	56
170	Grapes, other	0	Ton	0	0						
NUTS											
181	Almonds	0	Lb	0	0	183	Walnuts	0	Lb	0	0
182	Pecans	0	Lb	0	0	184	Other nuts (specify)	0	Lb	0	0
180	Pistachios	0	Lb	0	0						

SECTION IV - MONTHY WATER DISTRIBUTION

a. TYPE OF IRRIGATION SERVICE | x | Full | | Supplemental | | Temporary

	b. MONTH	c. WATER SUPPLY	d. OPERATIONAL SPILLS	e. TRANSPORTATION LOSSES	f. NON-AGRICULTURAL DELIVERIES (1) M&I	(2) Wildlife	(3) Misc.	g. DELIVERED TO FARMS
	1. PROJECT WATER (Acre-Feet)							
201	January	14,987.0	366.9	2,046.3	168.6	375.0	677.2	11,353.0
202	February	20,618.0	388.8	1,129.0	2,759.5	402.0	1,150.0	14,788.7
203	March	24,547.0	452.7	176.5	3,206.4	566.0	2,183.9	17,961.5
204	April	30,181.0	496.3	844.7	2,852.5	570.0	3,533.2	21,884.3
205	May	35,675.0	498.4	385.1	3,083.6	753.0	4,565.1	26,389.8
206	June	36,117.0	448.8	-243.7	2,537.5	504.0	5,020.6	27,849.8
207	July	38,042.0	447.6	797.9	3,358.9	587.0	4,739.1	28,111.5
208	August	37,585.0	483.5	-1,319.6	3,422.4	428.0	4,600.6	29,970.1
209	September	31,002.0	493.4	-983.9	2,978.6	398.0	3,056.7	25,059.2
210	October	24,596.0	489.0	1,091.9	3,081.9	138.0	2,859.6	16,935.6
211	November	25,490.0	427.6	1,108.0	3,163.4	13.0	2,035.8	18,742.2
212	December	20,119.0	407.4	167.4	3,335.7	70.0	1,052.1	15,086.4
213	TOTAL PROJECT WATER	338,959.0	5,400.4	5,199.6	33,949.0	4,804.0	35,473.9	254,132.1
214	M&I Population Served				0.0			
	2. NONPROJECT WATER (Acre-Feet)							
216	Annual Data	0.0	0.0	0.0	0.0	0.0	0.0	0.0
217	TOTAL (lines 213 and 216)	338,959.0	5,400.4	5,199.6	33,949.0	4,804.0	35,473.9	254,132.1

USBR Form 7-2045 Legend

Section I District Information and **Section II** District Lands in Irrigation Rotation	
	<u>Acreage Formula</u> k. Irrigable Acres = b. Commercial Acres + c. Non-commercial acres + f. Acres irrigated but not harvested + g. Acres not Irrigated Fallow and Idle
Section IV Monthly Water Distribution	
	c. Water Supply = Supply from AAC to Coachella Canal minus IID customers usage
	d. Operational Spills = Measured Regulatory Water
	e. Transportation Losses = Total Water Supply – (Water Sold + Regulatory Water)
	f. Non Agricultural Deliveries (Class 2 type of User) (1) M&I = Construction Water and East Valley Groundwater Replenishment (2) Wildlife = Water to Dos Palmas Preserve and the Wildlife Drinkers (3) Misc. = Golf Courses, hunting clubs, polo fields, and fish farms
	g. Delivered to farms = Class 1 type of user commercial agricultural activities.

Definitions

The following definitions of terms are provided to assist you in understanding the categories listed in the Form 7-2045.

Total District Acres	This acreage includes all acres within the district boundaries, including, farmsteads, roads, ditches, drains, dry cropped, idle, fallow, and grazed. This also includes all irrigable land for service and irrigable land not for service.
Irrigable Acres	The arable land under a specific plan for which water supply is or can be made available and which is provided with or planned to be provided with irrigation, drainage, flood protection, and other facilities, as necessary for sustained irrigation.
Full Irrigation Service	Applies to irrigable land now receiving, or to receive, its sole and generally adequate irrigation water supply through works or facilities constructed by or to be constructed by the Bureau of Reclamation. This term also applies to previously irrigated land in non-Federal projects where a substantial portion of the facilities has been or is to be constructed, rehabilitated, or replaced by Reclamation. Full irrigation service may be applicable to several types of land, such as regular projects, Warren Act, special contract, leased or water rental lands.
Commercial Acres	All irrigated acres that include harvested cropland and pasture in the irrigation rotation for land classes 1 through 5.
Non-Commercial Acres	Urban, Suburban, and Industrial acres. Nonagricultural irrigable land in residential, commercial, and industrial uses which include town areas, residential developments, suburban residences, industrial developments, etc.
Multi-Cropped Acres	Acres on which a second or successive crop is grown on the same land during the calendar year.
Acres Irrigated By	Total acres irrigated by a specific irrigation method including sprinkler, drip, and flood.
Acres Irrigated But Not Harvested	Crops planted but not harvested due to crop failure, adverse market conditions, etc. Also includes young non-bearing fruit trees and vines.

Section IV – Monthly Water Distribution

Type of Service	Full service when all lands are provided all irrigation water by Reclamation project, Supplemental water is when irrigation water comes from Reclamation project and non-project source, Temporary water service is when irrigation water is provided under a temporary arrangement from Reclamation.
Project Water	All water deliveries are in Acre-feet per month. Total Project water is the amount of water diverted by irrigation district for irrigation purposes.
Water Supply	Measured water diversion of project water delivered to the district.
Operational Spills	Amount of project water lost through operational spill, measured regulatory water.
Transportation Losses	The project water lost through seepage, evaporation, and evapotranspiration from plants on the canal bank.
M&I Deliveries	Project water delivered for Municipal and Industrial use such as water which is treated for potable use.
Wildlife Deliveries	Project water delivered for wildlife refuges or mitigation area.
Miscellaneous Deliveries	Project water delivered to urban and suburban lands, which includes rural residences with less than $1,000 in gross agricultural sales. Non-potable water customers in Class 2 type of user (golf course, polo fields, duck club, lakes, etc.)
Delivered to Farms	Total water delivered to agricultural customers in Class 1 type of user who use canal water for commercial
Gross Farmed Acreage	Area mapped and classified in a given survey.

Land classes and subclasses of the USBR system

Six land classes based on production economics are normally recognized. Brief descriptions are as follows:

Class 1 - **Arable**	Lands that are highly suitable for irrigated farming, being capable of sustained and relatively high yield of climatically adapted crops at reasonable cost. These lands have a relatively high payment capacity.
Class 2 - **Arable**	Lands that have a moderate suitability for irrigated farming. These are either adaptable to a narrower range of crops, more expensive to develop for irrigation, or less productive than Class 1. Potentially these lands have intermediate payment capacity.
Class 3 - **Arable**	Lands that have a marginal suitability for irrigated farming. They are less suitable than Class 2 lands and usually have either a serious single deficiency or a combination of several moderate deficiencies in soil, topography, or drainage properties. Although greater risk may be involved in farming these lands than those of Class 1 and 2, under proper management they are expected to have adequate payment capacity.
Class 4 **- Special use Lands**	Lands which in the USA are only suited to certain special uses (e.g. rice, pasture, or fruit) are classified 1, 2 or 3 (to reflect relative payment capacity) along with the appropriate letter designating the and use (crop).
Class 5 - **Non-arable**	This land is temporarily considered as non-arable because of some specific deficiency such as excessive salinity, questionable drainage, flooding, or other deficiency which requires further studies to resolve. The deficiency or deficiencies are of such a nature and magnitude that special agronomic, economic, or engineering studies are required to resolve the costs or effect on the land. Class 5 designation is tentative and should be changed to either Class 6 or an arable classification during formulation of the recommended plan of development.
Class 6 - **Non-arable**	Land that is non-arable under the existing or project economic conditions associated with the proposed project development. Generally, Class 6 comprises steep, rough, broken, rocky, or badly eroded lands, or lands with inadequate drainage, or other deficiencies. In some instances lands considered to be Class 6 in one area may be arable in another area because of different economic conditions. In addition to various physical-type deficiencies that result in a non- arable classification, lands initially classified as arable (potentially irrigable) on the basis of payment capacity (farm financial analysis) may be found non-arable if subsequent economic analysis (benefit analysis) indicates that benefits from such lands are less than their costs in a plan of development. Thus, the lower arable class(es) of lands would be considered non-arable and, of course, non-irrigable for economic reasons.