YUMA AREA AGRICULTURE

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Yuma Area Agriculture

- Agriculture continues to be a major contributor to the economy of Yuma County, accounting for about 40% of our economic base.

- Winter vegetable production is the major component of the agricultural industry, and so it is vegetables that drive the market in terms of price and rent paid for farmland. Market trends we identified one year ago continued through Summer 2009. There has been a further reduction in acreage planted to vegetables, with the reduction in acreage most apparent in the central and eastern portions of the Wellton-Mohawk District, in the Indian Unit (western half) of the Bard Valley, and in the lower portion of the Yuma Valley.

- Attitudes among growers improved in the Fall when prices for lettuce and romaine were high. A cautious optimism exists and it is possible it will carry into the 2010-2011 season.

Yuma County Statistics

- Yuma County is located in the southwestern portion of the State of Arizona along the Colorado and Gila Rivers. The nation of Mexico borders Yuma County to the south. California lies across the Colorado River to the west. Yuma County encompasses some 5,509 square miles and accounts for about 4.85% of the state's land mass. Within the county, about 8.5% of the land area is in private ownership.

- Population of Yuma County by some estimates now exceeds 200,000. The U.S. Census noted that Yuma County, which grew by some 4.1% yearly between 1990 and 2000, was the third fastest growing metropolitan area in the United States.

Brief History and Facts

- Agriculture is an integral part of the history of Yuma County. Prior to European exploration, Native Americans raised melons, gourds and grain in the flood plains of the Colorado and Gila Rivers.

- Traditional farming has been in the region since the 1860's, diverting water from both rivers.

- Today, there are approximately 200,000 acres of irrigated land around Yuma, most of it in seven irrigation districts, all of which rely on Colorado River water delivered through facilities developed by the U.S. Bureau of Reclamation. Location of these irrigated areas is shown on the Yuma Area Projects Map later in the presentation.

- The districts listed are shown together with current operation & maintenance fees for irrigation water. O&M fees have increased in the past few years, but the cost to obtain irrigation water here remains cost effective.

District Name	Size in Irrigable Acres	2010 Operation & Maintenance Fees
Yuma Project		
Valley Division	50,000	$86.00, includes first 5 acre feet.
Reservation Division	15,000	$67.50, includes first 5 acre feet
Unit 'B'	3,300	$150.00, includes first 10 acre feet
Gila Project		
North Gila Valley	6,000	$38, includes first 5 acre feet
South Gila Valley	12,000	$40, includes first 5 acre feet
Wellton Mohawk	60,000	$84, includes first 4 acre feet
Yuma Mesa	19,200	$70, includes first 9 acre feet
Total Acreage	165,500	

Yuma County

- Yuma County is generally ranked in the top 20 counties nationally in terms of gross agricultural income. Important winter vegetable crops include lettuce, salad greens, cauliflower, broccoli, celery, carrots, and melons in the spring. Field crops include cotton, alfalfa, bermuda, wheat and other grains. Much of Arizona's citrus is produced in Yuma County, some 13,300 acres.
- The area has a 12-month growing season, adequate irrigation water at a reasonable cost, and good soil quality. Most of the district farmland is multi-cropped. There is a strong demand for farmland suitable for production of winter vegetables in the valleys. Despite urban encroachment, there remains some demand for irrigated farmland on the Yuma Mesa, which is suitable for citrus; especially lemons, as well as alfalfa, green onions, and vegetable seed crops.
- Gross income from agriculture in Yuma County is often the highest in Arizona, depending on prices received. In 2006 the gross income generated by field crops, vegetables and citrus totaled about $1.05 billion, most of which is attributed to vegetables. Gross income from livestock in 2006 was around $227 million.

Listed below is the contribution in Gross Income to the local economy by general crop types and livestock for the past six years, as compiled by the Yuma County office of Cooperative Extension. Statistics for 2007 are not yet available.

Crop Type	2001	2002	2003	2004	2005	2006
Field	$70,083,047	$83,037,583	$94,128,964	$83,434,092	$77,462,291	$85,563,838
Vegetables	$606,816,998	$1,074,536,705	$452,274,510	$710,260,860	$647,513,392	$936,277,300
Tree & Vine	$32,103,968	$48,673,344	$44,997,116	$29,038,356	$18,080,549	$23,261,704
Livestock	$82,400,000	$79,196,000	$99,932,774	$134,545,000	$237,291,000	$227,082,190
Totals	$791,404,013	$1,285,443,632	$691,333,364	$957,278,308	$980,347,232	$1,272,185,032

- Data compiled by USBR suggests that the Bard Valley, California is estimated to have contributed an additional $60,000,000 gross income that is not included in the statistics compiled by Cooperative Extension.

Yuma County

- Gross revenues from field crops, citrus, and livestock have remained generally stable for several years. A substantial portion of our agricultural economy is based on winter vegetables, and this crop type has experienced some increase in revenues. 117,900 acres of lettuce, cauliflower, broccoli and other winter vegetables were produced in 2006. About 7,100 acres of cantaloupe, watermelons and honeydews were planted that spring. Most of the lettuce and a significant amount of other winter vegetables consumed in the United States are produced in Yuma County. One source estimated that about 120,000,000 vegetable boxes were produced in the 2002 season, a very profitable year as the above table shows. There are about 26 vegetable cooling facilities in the area; most of the newer facilities include salad mix plants. Package cost to develop such a facility can exceed $100 per square foot.

- A specialty crop in the Bard, California area is Medjool dates. Bard Water District reports there are approximately 1,300 acres planted to dates. This is the largest producing acreage for Medjool dates in the United States. Per the Office of Imperial County Agricultural Commissioner, gross value of date production totaled some $16,980,000 in 2007, based on only 963 harvested acres. Several hundred acres of Medjool dates have also been planted on the South Yuma Mesa outside irrigation project boundaries, irrigated from deep wells under drip irrigation. This acreage is now in production. Medjool date trees are also sold as a landscaping product, selling for between $2,000 and $3,500 per tree, depending on height and quality.

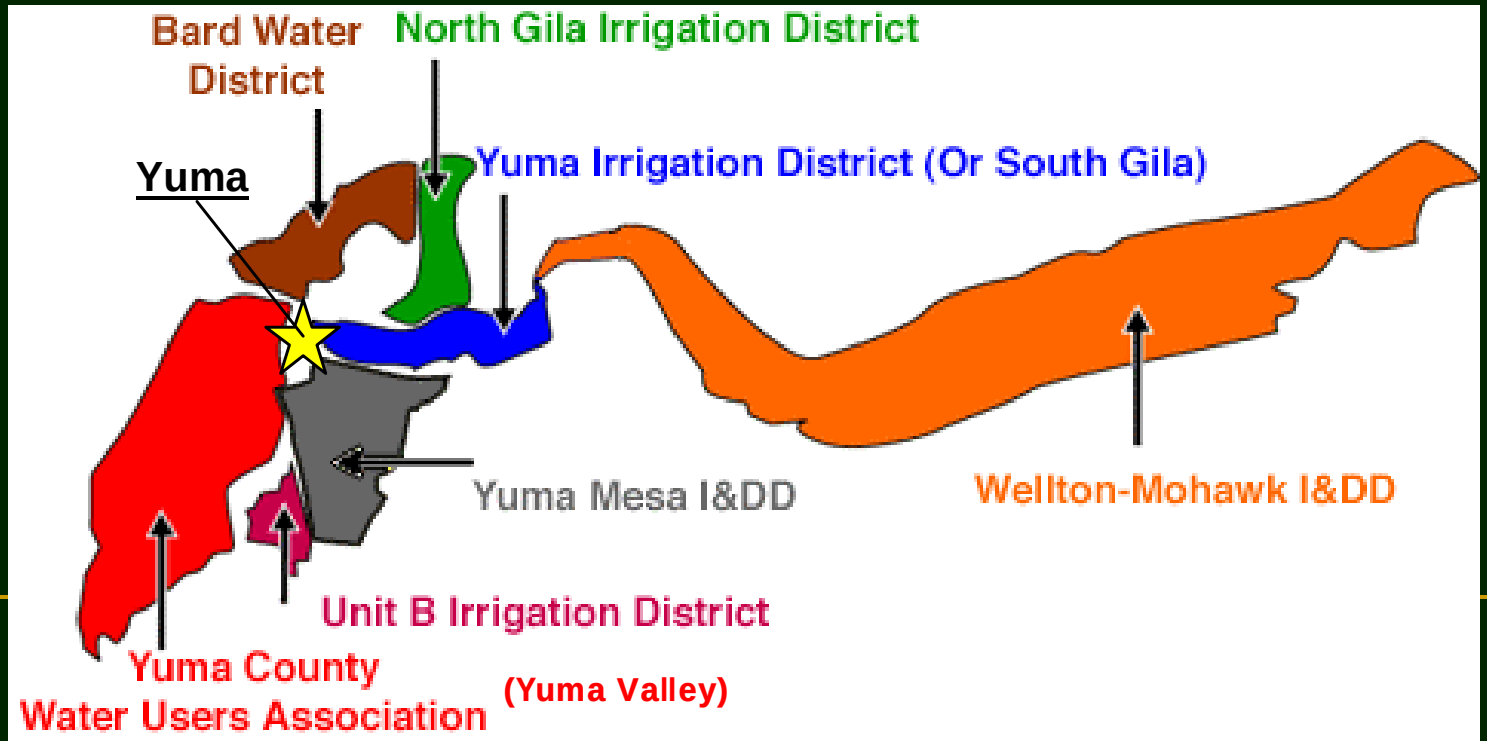
Yuma County

- While winter vegetable production continues to be principal factor in our economic base, there has been a decline in acreage planted to vegetables. Crop reports for 2007 from the irrigation districts compiled by Reclamation are not yet made public, but two sources tell us there has been a decline of 20 to 25% from the previous season. The decline in acreage is most apparent in the Imperial Valley and in the eastern portion of the Wellton-Mohawk Valley. We are also aware of several cancelled crop contracts in the Yuma Valley and the Gila Valley.
- The decline in acres planted was intended to solve low crop prices from over production, and solve a labor shortage. It is not yet clear that reduced production improved crop prices, which are also influenced by other factors. There are few complaints this season as to a lack of farm workers.
- With reduction of vegetable plantings, farmers turned to wheat, alfalfa, and milo (for ethanol) in 2008, all of which were profitable. Presently, crop contracts for wheat have fallen. Prices for alfalfa have declined, although still profitable.

Yuma County

- Irrigated land prices and annual cash rentals in the valleys vary because of location. Generally, the decline in vegetables acres has resulted in a consolidation of plantings closer to Yuma (Yuma Valley, Bard Valley, Gila Valley, Dome Valley). Prices paid for farmland in those areas remain stable, and buyers are typically operators, not investors. There has been only one recent sale for farmland in the eastern portion of the Wellton-Mohawk District, but wherever vegetable plantings have been replaced with field crops there has been reduction in rent revenue, so we expect a decline in land value also.

- Up to now rents for vegetable ground has been holding stable or modestly increasing. It is not clear if this will continue, as several growers state confidentially that they will try to negotiate lower rents as leases come up for renewal. We are waiting to see if this is merely conjecture, as there isn't evidence of decline in recently signed leases.



Values & Rent Rates For Irrigated Farmland in Yuma County & Bard Valley - 2009

Location	Value Per Acre	Sale Price Activity / Trends	Annual Cash Rents	Rent Rates Activity / Trends
Upper Yuma Valley	$22,000 - $26,500	Active / Stable	$600 - $800	Active / Stable
Lower Yuma Valley	$20,000 - $25,000	Limited / Stable	$550 - $750	Active / Stable
North & South				
Gila Valleys	$17,000 - $26,500	Limited / Stable	$600 - $800	Active / Stable
Yuma Mesa				
Districts	$15,000 - $25,000	Limited / Stable	$125 - $200	Limited / Stable
Wellton-Mohawk Irrigation District				
Dome Valley	$20,000 - $25,000	Limited / Stable	$500 - $750	Active / Stable
Wellton Area	$12,000 - $22,000	Limited / Stable	$350 - $550	Active / Stable
Roll Area	$10,000 - $13,000	Limited / Decline	$250 - $450	Active / Decline
Texas Hill	$8,500 - $12,500	Limited / Decline	$250 - $350	Active / Decline
Wellton Mesa	$5,000 - $9,000	Limited / Decline	$175 - $225	Limited / Stable
Bard Valley, CA.				
Irrigated Farmland	$20,000 - $25,000	Limited / Stable	$550 - $750	Active / Stable
Medjool Dates	$50,000 - $100,000	Limited / Stable	$.50 - $.60 / lb	Active / Stable

- Prepared by Tom Turner, ARA & Bill Moody