

Dome Valley/Wellton Planning Area Background Study



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Four of the pictures on the front cover are courtesy of the Wellton-Mohawk Irrigation and Drainage District

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Executive Summary

In December of 2001 the Board of Supervisors adopted the Yuma County 2010 Comprehensive Plan (plan). The plan is intended to accomplish coordinated and harmonious development in the nonjurisdictional areas of Yuma County. In order to accomplish this, the plan divided the county up into a number of planning and sub-regional planning areas. The Dome Valley/Wellton Planning Area encompasses the portion of Yuma County that is east of Gila Mountain, west of the Mohawk Mountains, south of the Yuma Proving Grounds, north of the Barry M. Goldwater Range, and is exclusive of the Town of Wellton.

It has been five years since the plan was adopted. Development trends and planned industrialization in this part of the county have identified a need to update to plan to better reflect the long range planning perspective. In order to accomplish this objective, the plan will be updated planning area by planning area. The first step in this process is the preparation of the Dome Valley/Wellton Planning Area Background Study, which will detail current conditions of the planning area, and how the area has changed in the past five years.

Since 2000, 274 housing units have been constructed in the Dome Valley/Wellton Planning Area. In the same time period, zoning changes were approved that could allow for the construction of up to 317 more housing units and amendments to the Comprehensive Plan were approved that would enable the rezoning of land that could allow up to 1,298 additional housing units. Investment in potential future housing needs appears to be driving changes to the Comprehensive Plan within the Dome Valley/Wellton Planning Area, rather than the current demand for housing.

During the past five years, sixty percent of new housing units constructed/installed in the Dome Valley Wellton Planning Area were manufactured homes, 21% were site-built, single family homes, and 19% were mobile homes. The housing in the Dome Valley/Wellton Planning Area is older than that found in Yuma County and Arizona as whole. The Dome Valley/Wellton Planning Area saw a greater percentage of its housing stock constructed between 1970 and 1979 than any other decade.

Privately owned lands make up 189 square miles (47%) of the Dome Valley/Wellton Planning Area. The Wellton-Mohawk Irrigation and Drainage District is currently in the process of acquiring 86 square miles of land (21.4% of the planning area) from the Bureau of Reclamation. This land transfer when completed will dramatically increase to pool of available developable land in the Dome Valley/Wellton Planning Area.

Population statistics from the 2000 Census were used for the demographic foundation of the study. In 2000 there were 3,151 residents in the Dome Valley/Wellton Planning Area. Compared to Yuma County and the State of Arizona as a whole, the Dome Valley/Wellton Planning Area had a much smaller percentage of its population in the 20 to 24 and 25 to 29 years old cohorts.

Dome Valley/Wellton Planning Area Background Study
Executive Summary

Agriculture dominates the economic activity in the Dome Valley/Wellton Planning Area. Nearly 29% of residents employed in the planning area work directly in the agricultural industry. The percentage of residents employed in the agricultural industry is three times higher than Yuma County as a whole and 17 times greater than the statewide percentage. Privately owned, non-farm enterprises employ 397 people in the Dome Valley/Wellton Planning Area, including the Town of Wellton. This fact may explain why 212 (22%) of employed planning area residents commute to jobs outside of the planning area.

In 2003, Arizona Clean Fuels Yuma proposed to build a 150,000 barrel per day oil refinery on a site five miles east of Tacna. This would be the first oil refinery constructed in the United States in more than thirty years. The proposed refinery is currently projected to cost \$2.6 billion to construct, and to employ around 600 people. The refinery is targeted to be operational some time in 2011.

The Dome Valley Wellton Planning Area has experienced significant change since 2001, and even more significant changes appear to be on the horizon. This study examines the changes that have occurred during the past five years and provides a baseline for preparing for the changes to come.

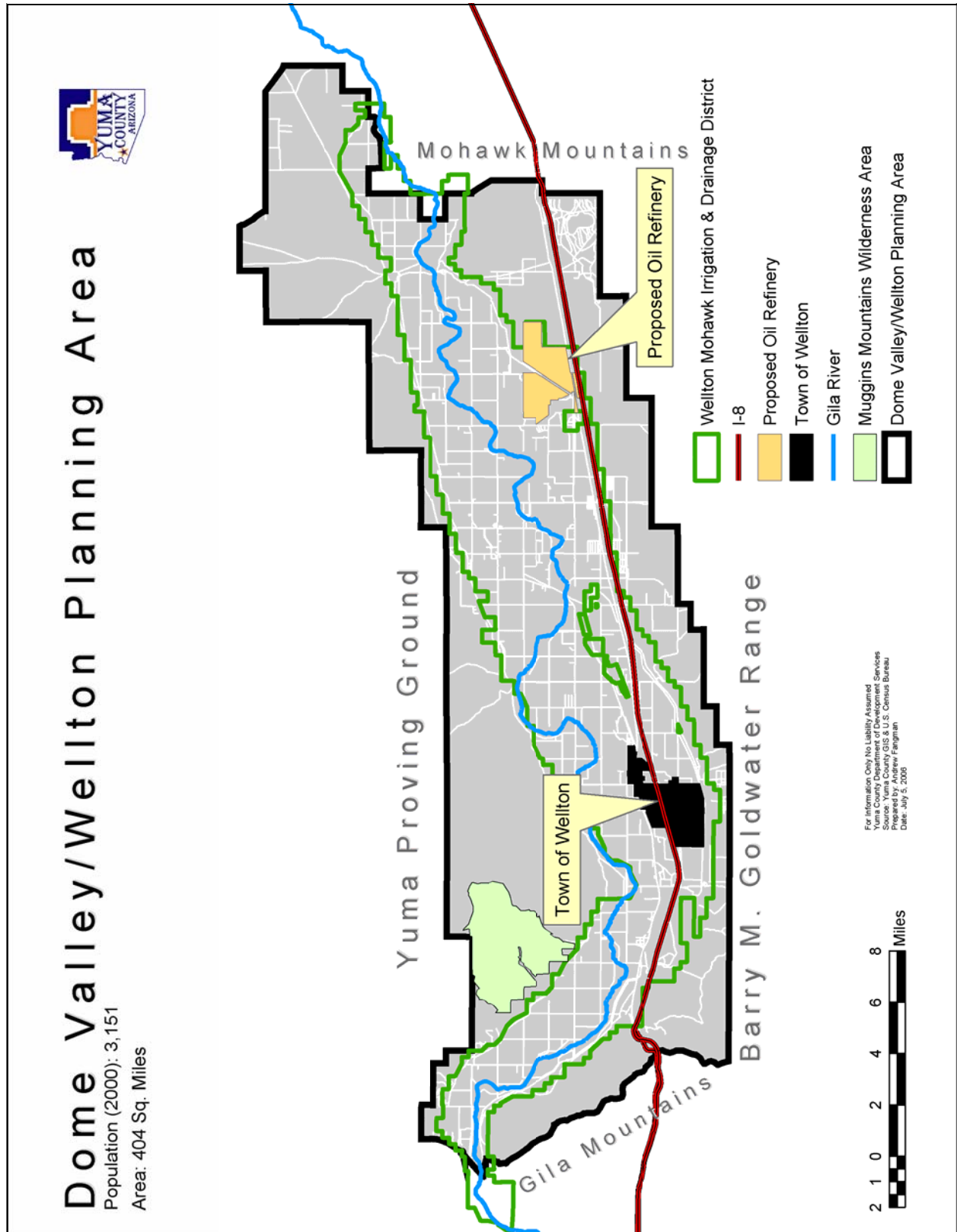


Figure 1: Dome Valley/Wellton Planning Area

Dome Valley/Wellton Planning Area Background Study

Introduction to the Planning Area

The Dome Valley/Wellton Planning Area is bounded on the west by the Gila Mountains, on the north by the Yuma Proving Grounds, on the east by the Mohawk Mountains, and on the south by the Barry M. Goldwater Range (see Figure 1). The total area is 404 square miles. The Town of Wellton, which serves the main urban center for the planning area, is surrounded on all sides by the planning area, but is not part of it, or under the planning jurisdiction of Yuma County. The population recorded in the 2000 Census for the planning area was 3,151.



Figure 2: Southern Boundary of the Planning Area



Figure 3: The Muggins Mountains

The Dome Valley/Wellton Planning area is bisected by the Gila River and Interstate 8, both of which travel in an east-west direction across the area. During most of the year there is very little natural flow in the Gila River, the water that is found in most of the time is the result of agricultural run-off. Located in the northwest corner of the planning area, the Muggins Mountains Wilderness Area covers 12 square miles. This is area that is managed by the Bureau of Land Management in manner that minimizes as much as possible human impact on the land

Approximately 62,000 acres of the Dome Valley/Wellton Planning Area is contained within the Wellton-Mohawk Irrigation and Drainage District. Which is state charter municipal corporation that is charged operating irrigation and power infrastructure within its boundaries. In August of 2002, the Wellton-Mohawk Irrigation and Drainage District was designated as a Rural Planning Area by the Yuma County Board of Supervisors. The RPA is notified by the county of development project applications in the RPA boundaries or within one mile of the RPA boundary. RPA recommendation are forwarded to the Board of Supervisors.



Figure 4: The Dome Canal

Dome Valley/Wellton Planning Area Background Study
 Topography & Climate

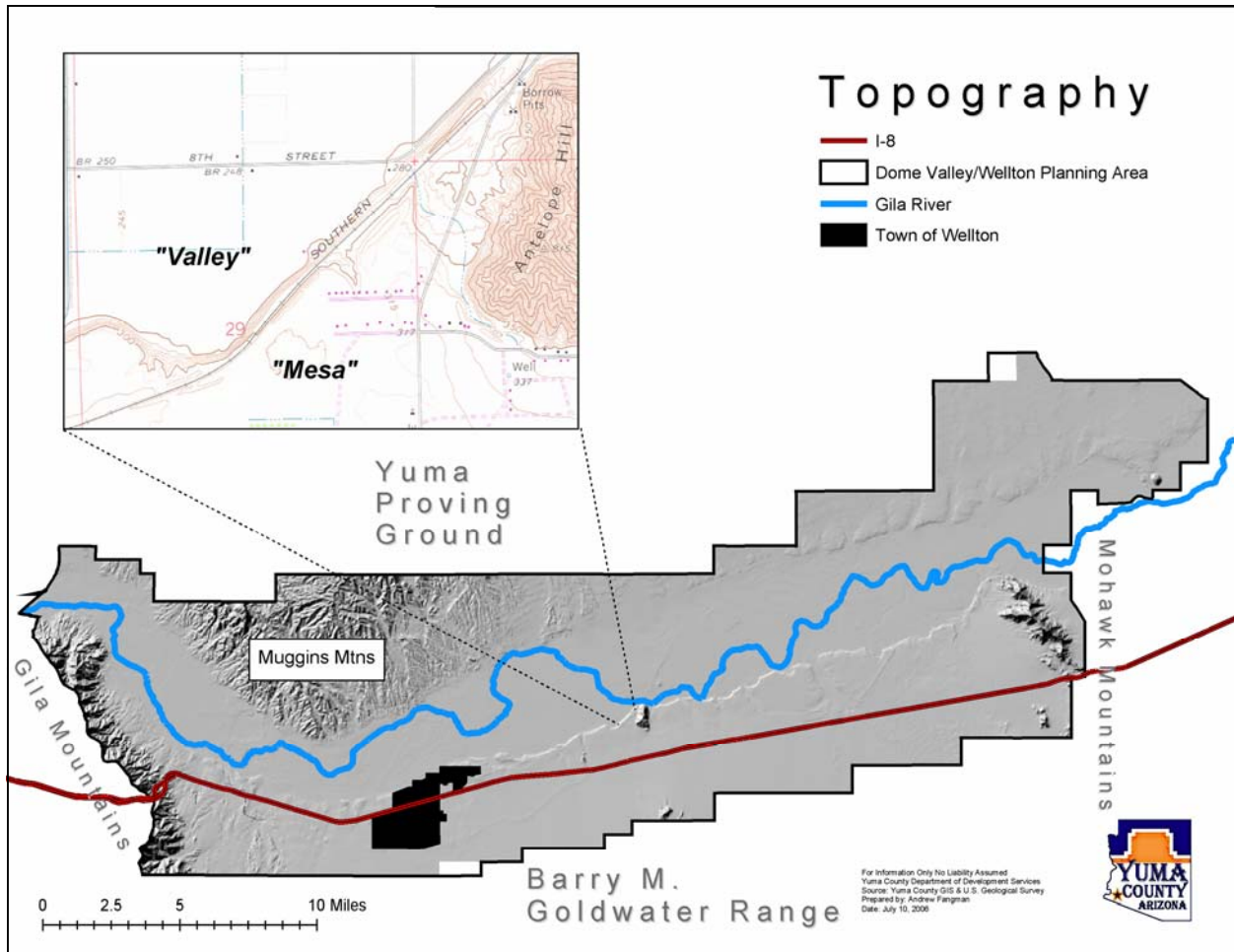


Figure 5: Topography of the Dome Valley/Wellton Planning Area

The majority of the Dome Valley/Wellton Planning Area is composed mostly of relatively flat terrain, that forms a valley along the Gila River. Parts of the Gila and Mohawk Mountain ranges are included on the western and eastern ends of the planning area. The Muggins Mountains are an area of rugged peaks in the northwest corner of the planning area. The Gila River is at the center of a valley where the agricultural activity in the Dome Valley-Wellton Planning Area occurs. The “mesa” rises abruptly above the Gila River Valley is a flat area drained by washes. The majority of residential development has occurred on the “mesa”

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Ave. Max. Temp.	68.9	73.5	79.5	86.5	94.8	103.4	106.5	105.6	100.9	90	77.2	68.3	87.9
Ave. Min. Temp.	35.9	39.6	44.1	49.5	57.6	65.5	75.3	75.4	68.2	54.8	41.6	34.7	53.5
Average Total													
Precipitation (in.)	0.49	0.47	0.47	0.16	0.1	0	0.35	0.72	0.41	0.31	0.34	0.43	4.25

Table 1: Monthly Temperature and Precipitation Averages¹

The climate of the Dome Valley/Wellton Planning Area is hot and dry. Moisture comes from intense thunderstorms during the monsoon season, July through September, and from more gentle winter rains that typically occur December through March.

¹ As measured at Tacna. Western Regional Climate Center

Dome Valley/Wellton Planning Area Background Study
Soil Types

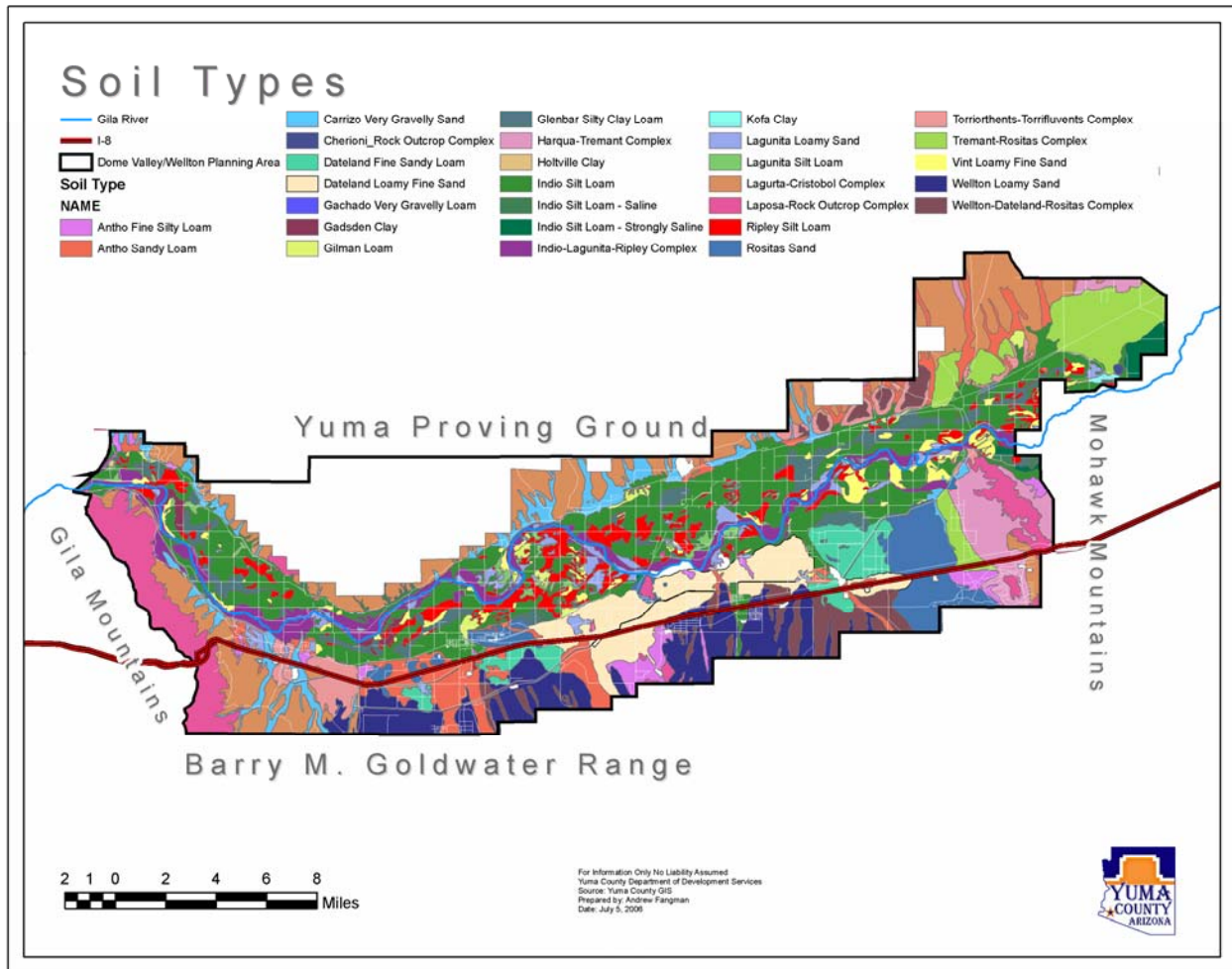


Figure 6: Soil Types in the Dome Valley/Wellton Planning Area

North of the Gila River flood plain area are the Liguria-Cristobal-Carrizo type soils. These soils are characterized as deep, nearly level, excessively drained, loose, and very gravelly located on alluvial fans, low terraces and flood plains (See Figure 6). The portion of the DSA area that is in the Gila River flood plain, which includes the Town of Wellton and the community of Dome, consists of Indio, Lagunita and Ripley soils. Erosion has enabled the soils to develop deeply layered, silty and sandy characteristics. Surface layers are typically six to eight inches thick with underlying material up to or exceeding 60 inches.

The soils south of I-8 are characterized as deep, nearly level, well drained, and loamy located on old alluvial fans and high terraces. Soils in the area may have an excessive concentration of salts, calcium, magnesium, chlorides and sulfates. Localized leaching can occur because of the low precipitation and high evaporation rates

In 1993, the Gila River flooded and surface floodwaters spread over farmlands in many parts of the project area eroding topsoil and depositing silt, sands and gravel. Some of the farmlands have been rehabilitated and others have been acquired by the Wellton-Mohawk Irrigation and Drainage District (WMIDD) as part of the Gila River Flood Channel Restoration Project.

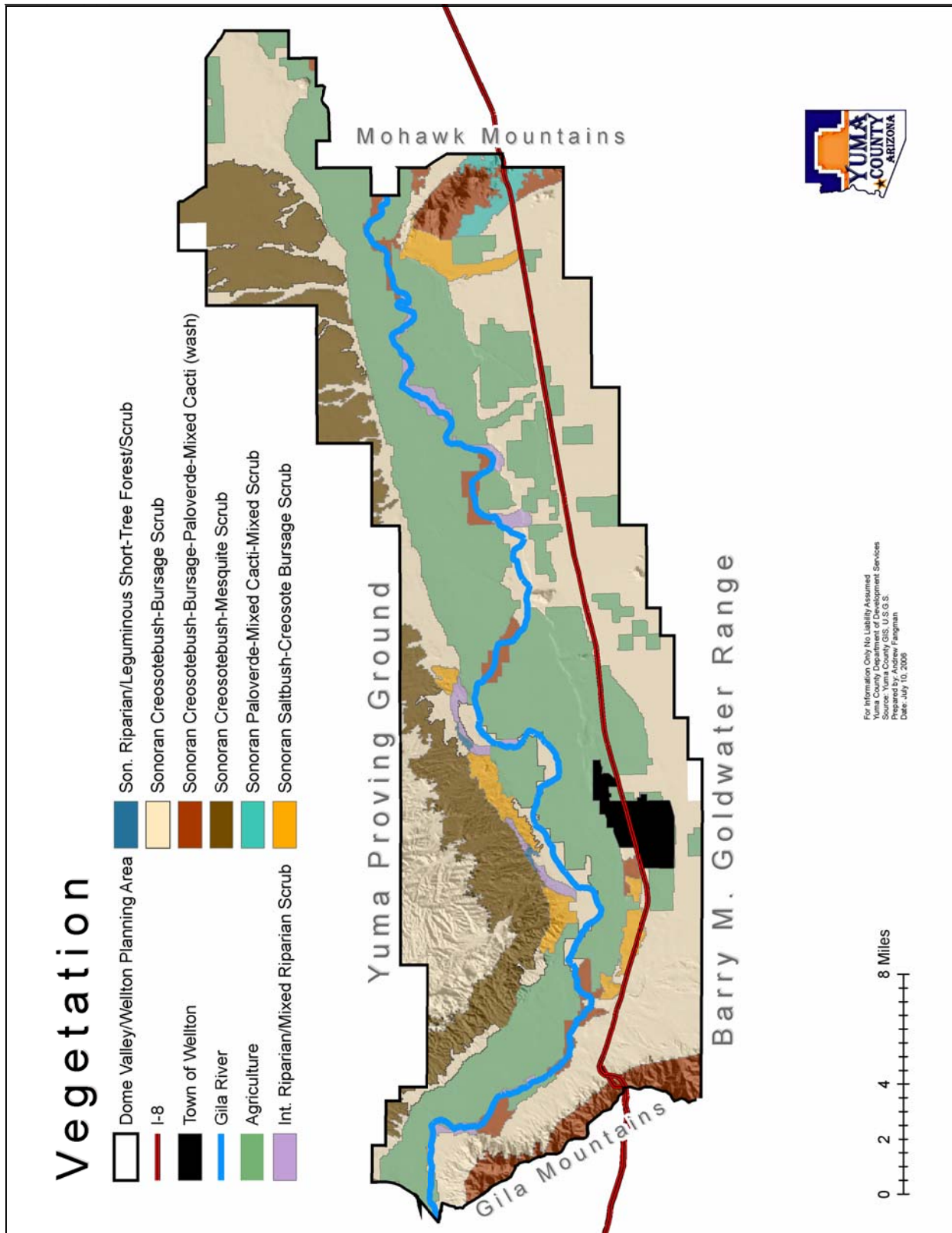


Figure 7: Vegetation Types in the Dome Valley/Wellton Planning Area

Intermediate Riparian/Mixed Riparian Scrub: These communities are confined to places with abundant moisture which may not be associated with obvious riparian features. In the southwest, these communities are called “bosques,” closed or nearly closed stands of deciduous shrubs. Herbs, if present, are patchy and scattered. Shrub height is 1.2–2.1 meters with scattered plants to 3.7 meters. Total vegetation cover is 50–100%.²



Figure 8: Int. Riparian/Mixed Riparian Shrub

Sonoran Riparian/Leguminous Short-Tree Forest/Scrub: Found along drainages in the southern half of the state, 90% of this vegetation has been cut or is in poor condition. They are of particular interest because they are highly diverse and have high value to wildlife. Closed stands of deciduous broad-leaf trees and short trees with lower shrub layers can also be found. Total vegetation cover is between 70 and 100%.²



Figure 9: Son. Riparian/Leguminous Short-Tree Forest/Scrub

Sonoran Creosotebush-Bursage Scrub: Develops on level to gently sloping soils of generally silty or sandy texture. This vegetation lies in large patches crossed by desert washes and floodplains. Very open evenly spaced low diversity stands of shrubs 0.3–0.9-m tall, containing a few scattered trees and cactus species. Perennial cover is usually 10–20%, but in wet years annual plants may provide 100% cover.²



Figure 10: Sonoran Creosotebush-Bursage Sage

Sonoran Creosotebush-Bursage-Paloverde-Mixed Cacti (wash): Develops on rock piles and middle and upper bajadas where soils are well-drained and of a cobbly, gravelly texture. A diverse mixture of evergreen and deciduous trees, shrubs, and cacti with cover from 15 to 45 percent. The height of the trees range from 3 to 6 m, the cacti from 15 cm to 9 m, the shrubs 0.6 to 2 m, and the half-shrubs 0.2 to 0.6 m.²



Figure 11: Son. Creosote-Bursage-Paloverde Cacti (wash)

²Description of Arizona Vegetation Represented on the GAP Vegetation Map, By: Peter S. Bennett, Michael R. Kunzmann, & Lee A. Graham. Biological Resources Division, U.S. Geological Survey

Sonoran Creosotebush-Mesquite Scrub: This vegetation is found on valley fill. The soils are erosion prone and silty. Such erosion has left the shrubs perched on low soil mounds. Shrub communities with perennial vegetation cover of 15–30%. Ephemeral herb cover may approach 100% in wet years. Shrub height, 0.2–1.5 m.³



Figure 12: Sonoran Creosotebush-Mesquite Scrub

Sonoran Paloverde-Mixed Cacti-Scrub: Develops on rock piles and middle and upper bajadas where soils are well-drained and of cobbly, gravelly texture. Saguaros tend to be confined to coarse textured soils on rocky slopes where they find firm footing. A diverse mixture of evergreen and deciduous leguminous trees, shrubs, and cacti with cover from 15 to 45 percent.³



Figure 13: Sonoran Paloverde-Mixed Cacti-Scrub

Sonoran Saltbush-Creosote Bursage Scrub: . These soils are easily detached and severe erosion is frequently seen in grazed stands. Water penetration of such fine soils is poor making them prone to collect salt. This vegetation has been greatly reduced by conversion to agriculture. Uniform stands of gray-green evergreen or annual shrubs 0.6–1-m tall with 10–20% cover.³



Figure 14: Sonoran Saltbush-Creosote Bursage Scrub

Agriculture: Lands being used for agricultural production.³



Figure 15: Agriculture

³ Description of Arizona Vegetation Represented on the GAP Vegetation Map, By: Peter S. Bennett, Michael R. Kunzmann, & Lee A. Graham. Biological Resources Division, U.S. Geological Survey

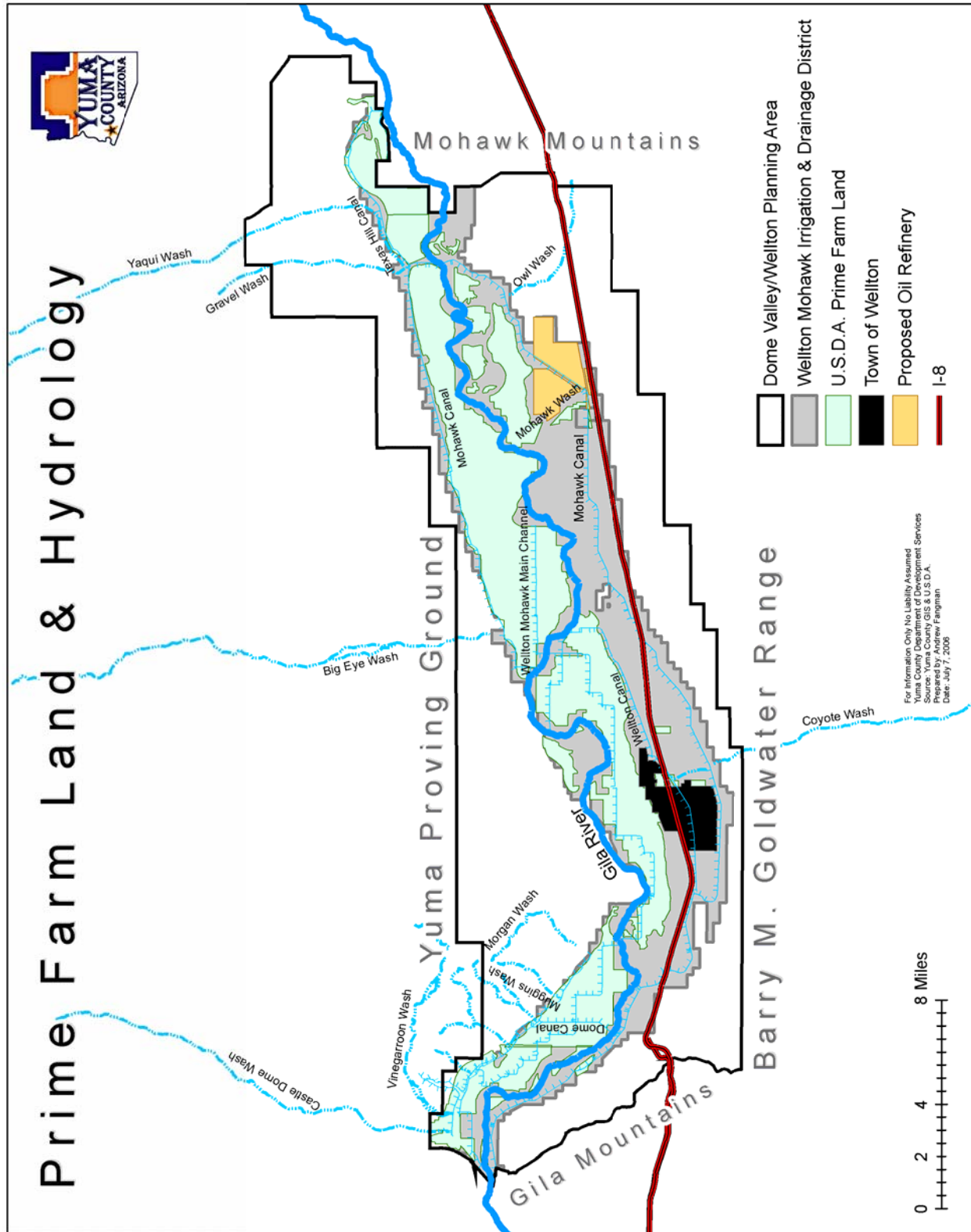


Figure 16: Prime Farmland and Hydrology

Dome Valley/Wellton Planning Area Background Study
Hydrology

The current hydrology of the Dome Valley/Wellton Planning Area is largely as result of the creation of the Wellton-Mohawk Irrigation & Drainage District. In 1947, the U.S. Congress authorized the construction of major irrigation infrastructure in the area, and the State of Arizona created the Wellton-Mohawk Irrigation & Drainage District in 1951 to manage new irrigation infrastructure. Prior to that time, groundwater had been the major source of irrigation water. However, by the mid 1930's the water table began to decline rapidly developing an excessive salinity and resulting agricultural efforts became far less economically viable. Construction work started in 1949 and the first water was delivered to fields in 1952. Ultimately, approximately 378 miles of main canals, laterals, and return flow channels were constructed.⁴

Wellton-Mohawk's water comes from the Colorado River. Flow is diverted at the Arizona abutment of Imperial Dam, into the Gila Canal, a joint-use facility shared by five Yuma-area irrigation districts. WMIDD's share of the flow is delivered at Gila Canal Mile 15 into the Wellton-Mohawk Canal.⁴

The problem of increasing salinity in the groundwater did not disappear with initial construction. Water accumulating beneath irrigated fields can have a saline content highly damaging to plant life, have large areas of the soil salinity and varying chemical composition "imported" as part of the irrigation water. This salt has been dissolved from natural sources in the soil, and washes into streams with each rain or snowmelt. The use of water for growing plants, whether in a natural or cultivated setting, concentrates naturally occurring salts.⁴

For this reason, WMIDD constructed a network of 90 evenly spaced drainage wells. These wells drained into concrete lined collector channels. These channels then flow into a main conveyance channel which discharges into the Colorado River near Yuma.⁴

Water provided by WMIDD irrigates over 62,000 acres in the Dome Valley/Wellton Planning Area. The resulting agricultural activity is the dominate land use and economic activity of the area. Water is also provided to several small communities, through public or private municipal/domestic water distribution systems. There are hundreds of individual, domestic turnouts providing untreated canal water to individual residences.⁴



Figure 17: Typical Drainage Well⁴



Figure 18: Gila Gravity Canal Headworks⁴

⁴Wellton-Mohawk Irrigation and Drainage District

Dome Valley/Wellton Planning Area Background Study
Communities



Figure 19: Wellton

The Town of Wellton is the only incorporated municipality in Yuma County east of the Gila Mountains. Wellton was founded in 1878 as watering station for the Southern Pacific Railroad. With the completion of the Wellton-Mohawk Irrigation and Power project and the subsequent agricultural boom in the area, Wellton became the support community for agricultural activities in the area.⁵ In 1970 Wellton incorporated and by 2005 had grown to 1,862⁶ persons, covering just over 6 square miles. Wellton serves as the commercial and civic hub of the Dome Valley/Wellton Planning Area. The Town of Wellton is not under the land use planning jurisdiction of Yuma County.. In 2003 the Town of Wellton 2003 completed a update their General Plan.⁵

Tacna is an unincorporated community centered on the intersection of Interstate 8 and Avenue 40E. In 2000 the population of Tacna was 555.⁷ Tacna has some small scale commercial activity and a post office that serves local residents, the surrounding agricultural areas, and I-8 traffic. The gas station in Tacna is the only one in a very large area, the closest to the west is 11 miles, and the closest to the east is 24 miles. Tacna is also a home to a volunteer fire department which serves all of the planning area, except for the area in close proximity to Wellton, which is served by Wellton's fire department. A proposed oil refinery site is 5 miles east of Tacna.



Figure 20: Tacna



Figure 21: Mohawk Valley School in Roll

Roll is a cluster of commercial activity and a post office at the intersection of Avenue 38E and County 5th St. These businesses serve some of the needs of agriculture in the area. Mohawk Valley School, a Kindergarten through 8th grade school, is in the Roll area at Avenue 39E and County 5th Street.

⁵ Wellton 2003-2013 General Plan, Town of Wellton

⁶ U.S. Census Bureau

⁷ Defined by the U.S. Census Bureau as the between Ave. 38E and Ave 41E and Co. 8th St. and I-8

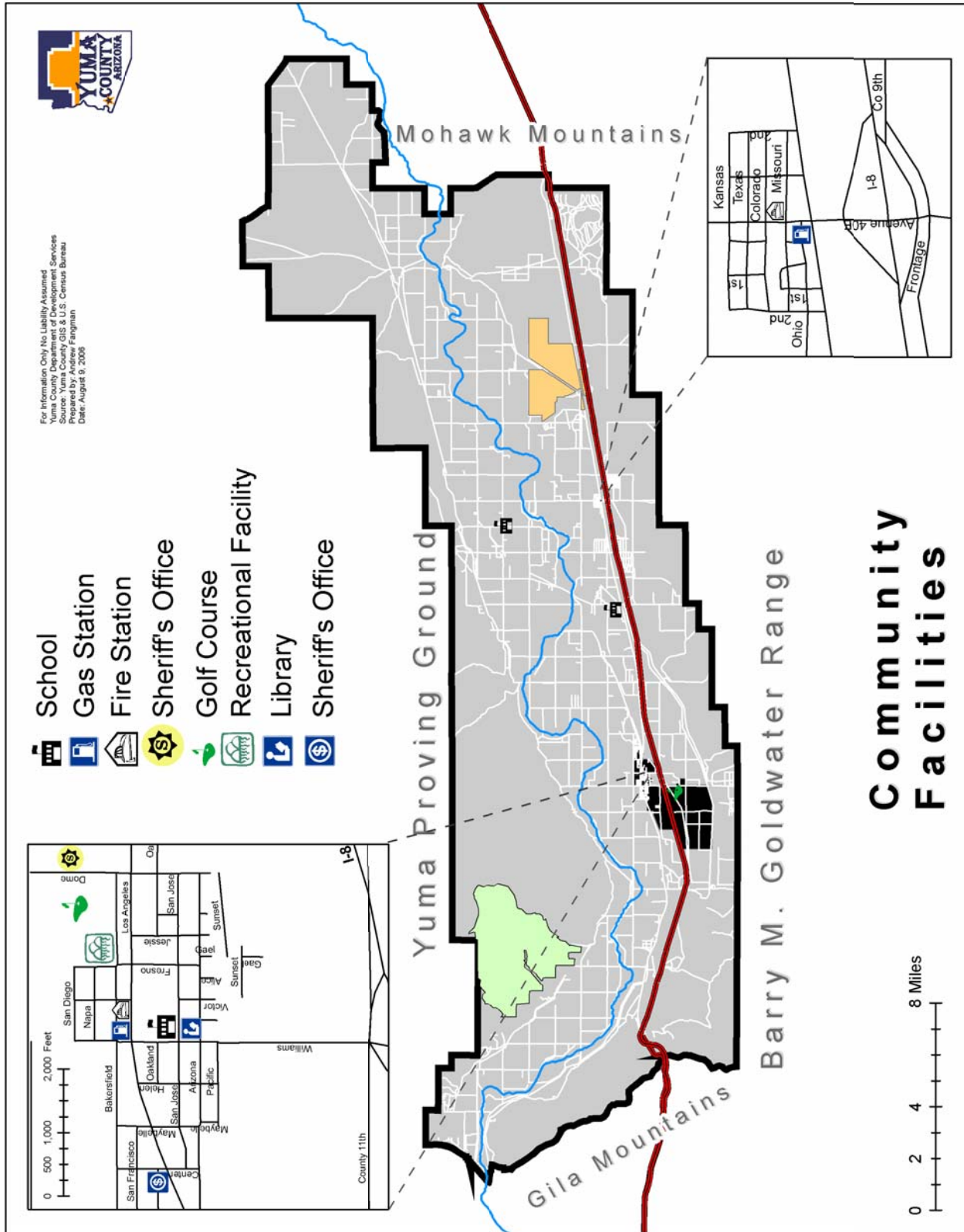


Figure 22: Community Facilities

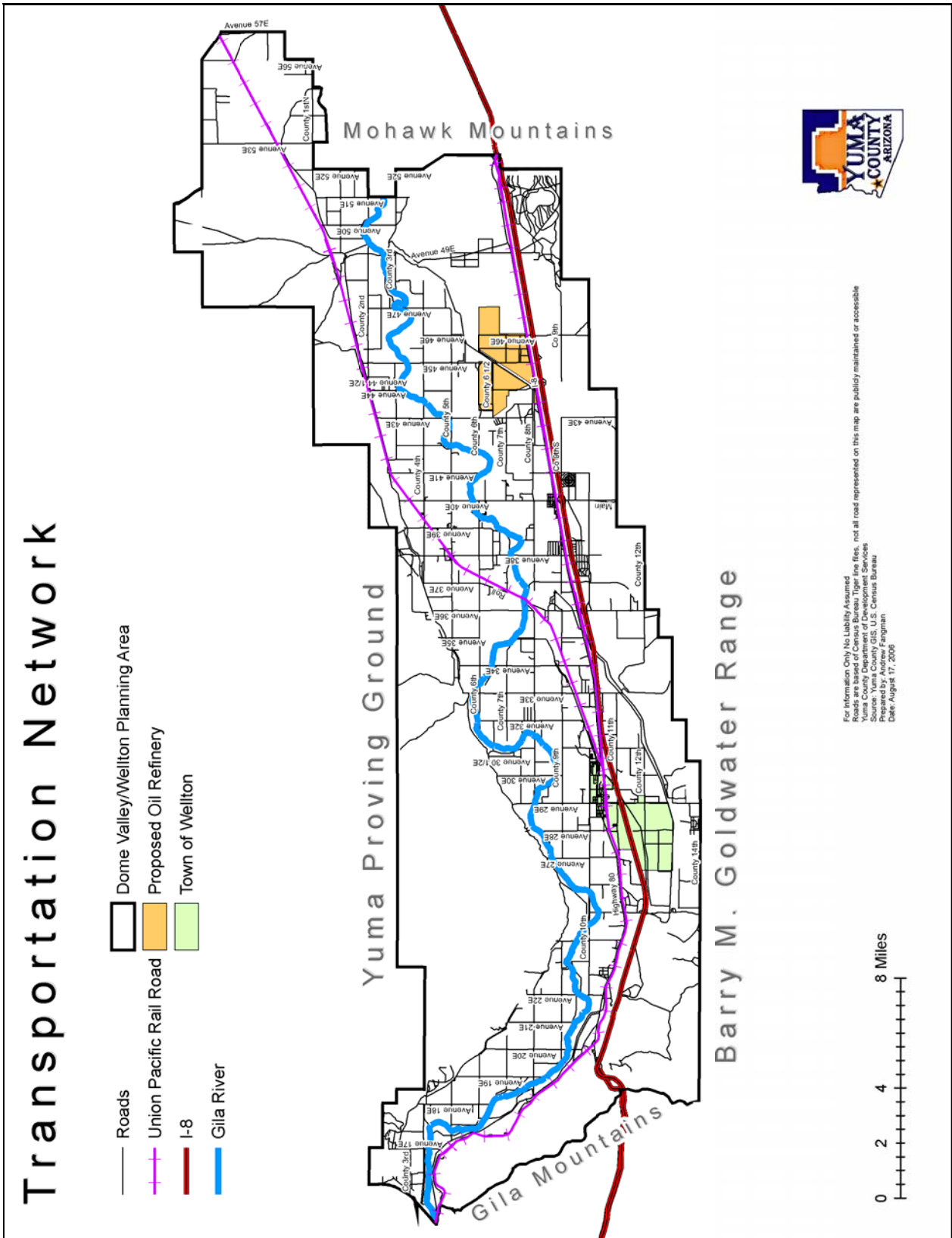


Figure 23: Transportation Network

Dome Valley/Wellton Planning Area Background Study

Transportation

The transportation network in the Dome Valley/Wellton Planning Area is developed around an east-west access corridor, principally Interstate 8 and the Union Pacific Railroad. The presence of the Yuma Proving Ground to the north and the Barry M. Goldwater Range to the south means that there is no public access to the planning area from the north or the south. There are only two roads that exit the planning area to the west, Interstate 8 over Telegraph Pass and County 3rd Street which is directly north of the Gila Mountains. There are only two roads that exit the planning area to the east because of the Mohawk Mountains, Interstate 8 over Mohawk Pass and the Dateland Ranch Road north of the Mohawk Mountains.

Interstate 8 is the primary transportation artery in the planning area. There are four interchanges in the planning area at Old Highway 80, Avenue 29E, Avenue 36E and Avenue 40E. The balance of the road system is a network of paved and unpaved section line roads. Section line roads are spaced a mile apart, running both east to west and north to south. Not all section line roads in the Dome Valley/Wellton Planning Area have an improved or developed road developed along them. In many cases, the only "access" which exists is undeveloped right-of-way.

The planning area is bisected in an east-west direction by the Union Pacific Railroad's main southern transcontinental tracks known as the Sunset Route. The Sunset Route handles as many as 70 trains per day. This all-weather freight corridor links the Port of Los Angeles in California with the Port of Houston in Texas. These two ports are the two largest shipping volume, inter-modal, deepwater ports in the United States. Through these two ports pass most of the imported and exported goods consumed or produced in the United States.⁷ The construction of this railroad was one of the major factors behind the Gadsden Purchase in which the United States acquired all the land between the Gila River and today's border from Mexico in 1853.⁸ Currently Union Pacific is developing plans to add a second parallel track to the existing track.

On January 30, 2006, public transportation came to the Dome Valley/Wellton Planning Area for the first time when service started on Yuma County Area Transit's (YCAT) Wellton-Foothills route. This bus route begins at the Wellton Community Center and ends at the Yuma Palms Regional Shopping Center in Yuma, where it connects with the rest of YCAT's bus route system. The Wellton-Foothills route makes four stops in the Town of Wellton - Old Highway 80 & Ligurta Creek Road, Ligurta Station, the Foothills and at Arizona Western College in Yuma.

The Yuma Metropolitan Planning Organization (YMPO), a transportation policy-making organization, is made up of representatives from the City of San Luis, the City of Somerton, the Town of Wellton, the City of Yuma, the Cocopah Indian Tribe, Yuma County, and the Arizona Department of Transportation (ADOT). The YMPO Transportation Improvement Program (TIP) provides a list of current transportation projects within Yuma County. The TIP is prepared by the YMPO staff working with member agencies to plan and development improvement programs in conjunction with member entities. These projects are funded with federal, state, or local funds including federal grants. Required under federal and state legislation, the TIP spans a five-year period and must be updated at least every year. The TIP is approved by the YMPO Executive Board and the Governor of Arizona.⁹

⁷ YMPO 2006-2029 Regional Transportation Plan

⁸ Luber, Diane. "U.S. Wanted Rail Route." *Arizona Daily Star*, February 12, 2004

⁹ Yuma Metropolitan Planning Organization

Dome Valley/Wellton Planning Area Background Study

Transportation

The only projects listed in 2007-2011 TIP for the Dome Valley/Wellton Planning Area are: 1) a Bridge Replacement at Avenue 21E at Co. 7 ½ St., Old Highway 80, scheduled to take place in 2007 and 2008, and, 2) the extension of County 8th St. from Avenue 36E to Avenue 37E scheduled to take place in 2007.

The Town of Wellton has several projects identified in the TIP the most significant being a \$25 million reconstruction of the Williams St (Avenue 29E) & Interstate 8 interchange. A funding source and start date for this project have not yet been identified.¹⁰

If the proposed oil refinery is constructed, it will necessitate major improvements to the transportation infrastructure. An interchange would have to be constructed most likely at Avenue 45E. The funds for this would have to come from private sources as the ADOT currently does not have plan to fund any additional interchanges the planning area. Additional improvements to the road network in the vicinity of the refinery site will also be necessary, although the exact nature of the needed improvements will not be known until site development plans for the refinery are submitted for review. A traffic study will be needed to asses necessary traffic improvements

As the Dome Valley/Wellton Planning Area develops so will the need for the further development of the roadway network. Currently the Yuma County Zoning Ordinance calls for the dedication of rights-of-way in order build roads under the following system:

- Major arterial roads along section lines.
- Minor arterials along half sections lines.
- Collector roadways along quarter section lines.

It should be noted that roads will only be built as development warrants it and within the financial and planning limitations for existing major expansion plans currently exist.

Dome Valley/Wellton Planning Area Background Study

Demographics

All census derived data is based on statistics for Census Tract 112, Yuma County (see Figure 23). Census Tract 12 is mostly contiguous with the Dome Valley/Wellton Planning Area. Census Tract 12 does contain the Town of Wellton, which, as an incorporated municipality, is not part of Dome Valley/Wellton Planning area. This was corrected for by subtracting the statistics for the Town of Wellton from the figures for Census Tract 112. A small area, north of the Gila River and east of Gravel Wash in the northeast corner of the Dome Valley/Wellton Planning Area, is not included in Census Tract 112. This area largely consists of extremely sparsely populated open desert; the exclusion of this area will not have a significant impact in the accuracy of using Census Tract 112 data minus the Town of Wellton data to represent the Dome Valley/Wellton

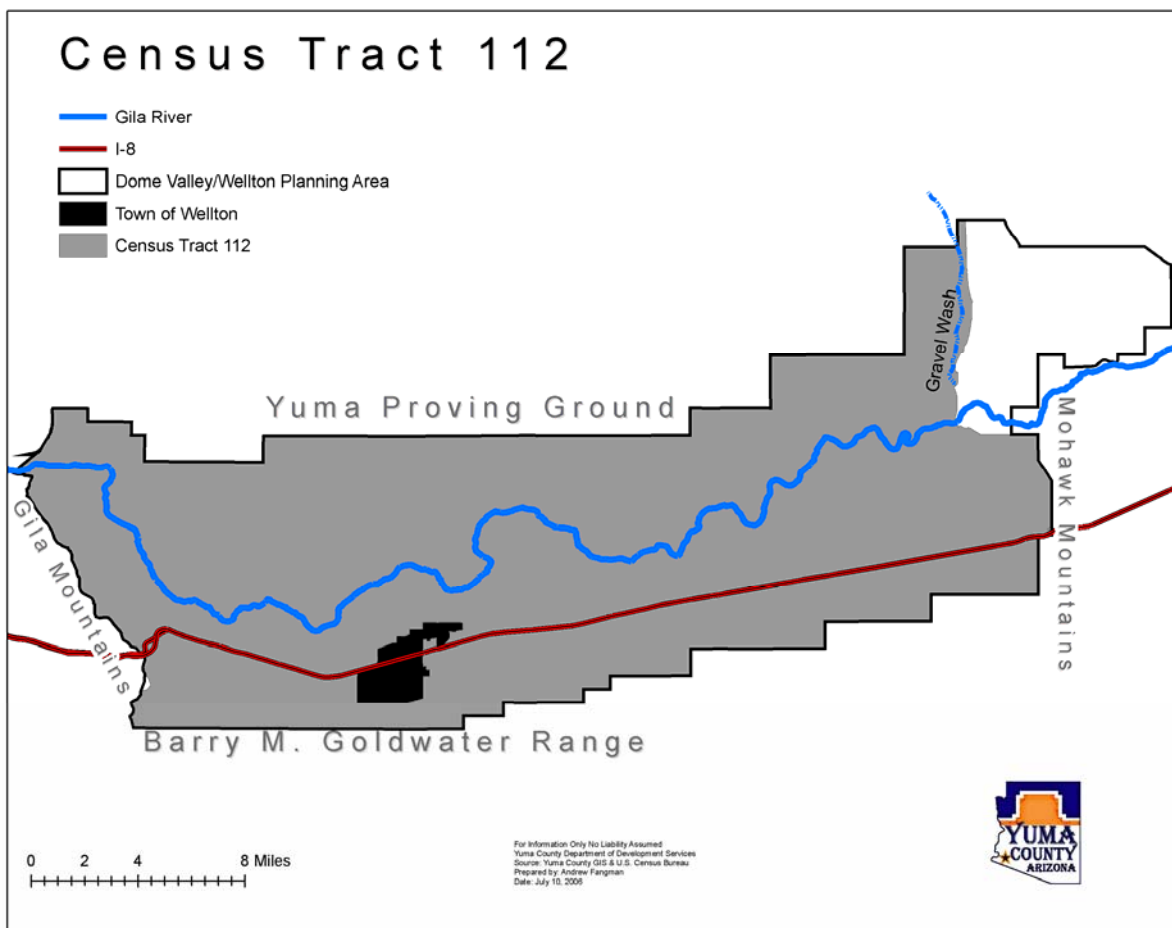


Figure 24: Census Tract 112

All census data reflects the existing situation on April 30, 1999, the official date of the 2000 Decennial Census. While this was over seven years ago, the census remains the best source of demographic data for the Dome/Valley Wellton Planning Area. Only the census provides data at a geographically sufficient level allowing the Dome Valley/Wellton Planning Area to be examined or compared with other large areas that are not part of the planning area. With many other more recent sources of demographic data, the most appropriate way to examine the planning area is to examine Yuma County as a whole. The population of the Dome Valley/Wellton Planning Area comprises approximately 2% of the total population for Yuma County. As such, conclusion about the characteristics of the population of the Dome Valley/Wellton Planning Area cannot be accurately drawn from statistics about the entire population of Yuma County.

Dome Valley/Wellton Planning Area Background Study
 Demographics

	Dome Valley/Wellton P.A.	Yuma County	Arizona
Total Population	3,151	160,026	5,130,632
White, Non-Hispanic	1,843	70,956	3,274,258
Hispanic	1,202	80,772	1,295,617
African-American	7	3,136	149,941
Other	99	3,313	161,490

Table 2: Population, Race, and Ethnicity⁸

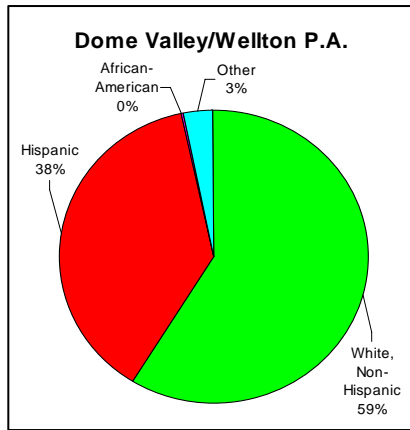


Figure 25: D.V.W. Race and Ethnicity⁸

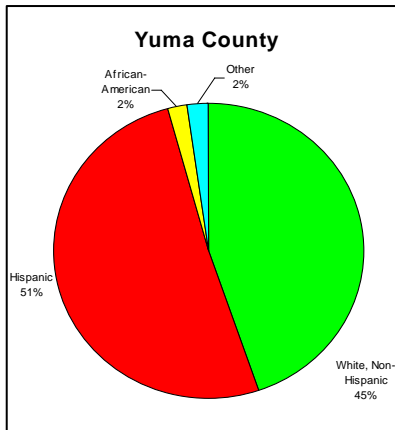


Figure 26: Y.C. Race and Ethnicity⁸

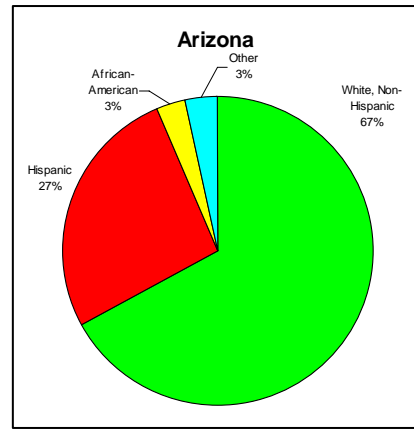


Figure 27: AZ Race and Ethnicity⁸

The total population of the Dome Valley/Wellton Planning Area was 3,151, in April of 1999. Fifty-nine percent classified them-selves as White, non-Hispanic, a greater percentage than the county as whole. More than the 45% in Yuma County as whole who classified themselves as White, non-Hispanic, but less than the State of Arizona. People classifying themselves as Hispanic make up the overwhelming majority of the minority population of the planning area.

	Dome Valley/Wellton P.A.	Yuma County	Arizona
English	673	31,175	1,399,747
Spanish	383	20,984	351,078
Other	21	1,745	150,800

Table 2: Language Spoken at Home by Household¹¹

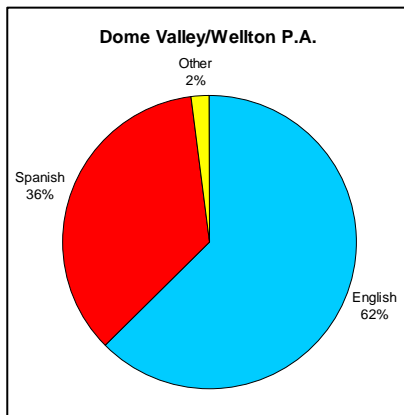


Figure 28: D.V.W. Language¹¹

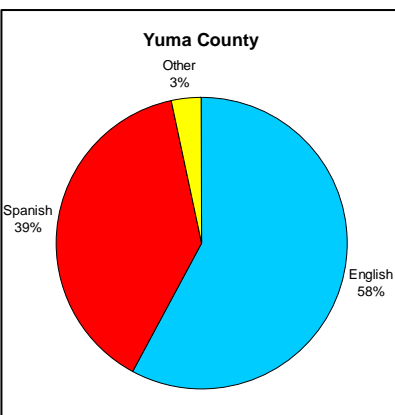


Figure 29: Y.C. Language¹¹

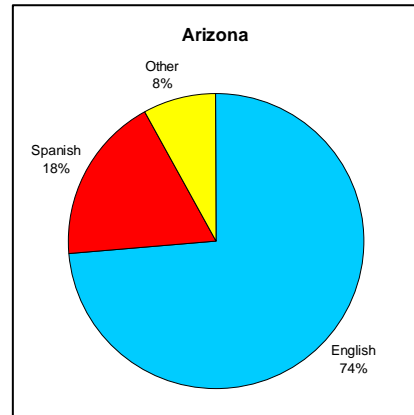


Figure 30: AZ Language¹¹

In the Dome Valley/Wellton Planning Area, 36% of households speak Spanish at home. This is nearly identical to the rate of Yuma County as whole, and double that of the State of Arizona.

¹¹ 2000 U.S. Census

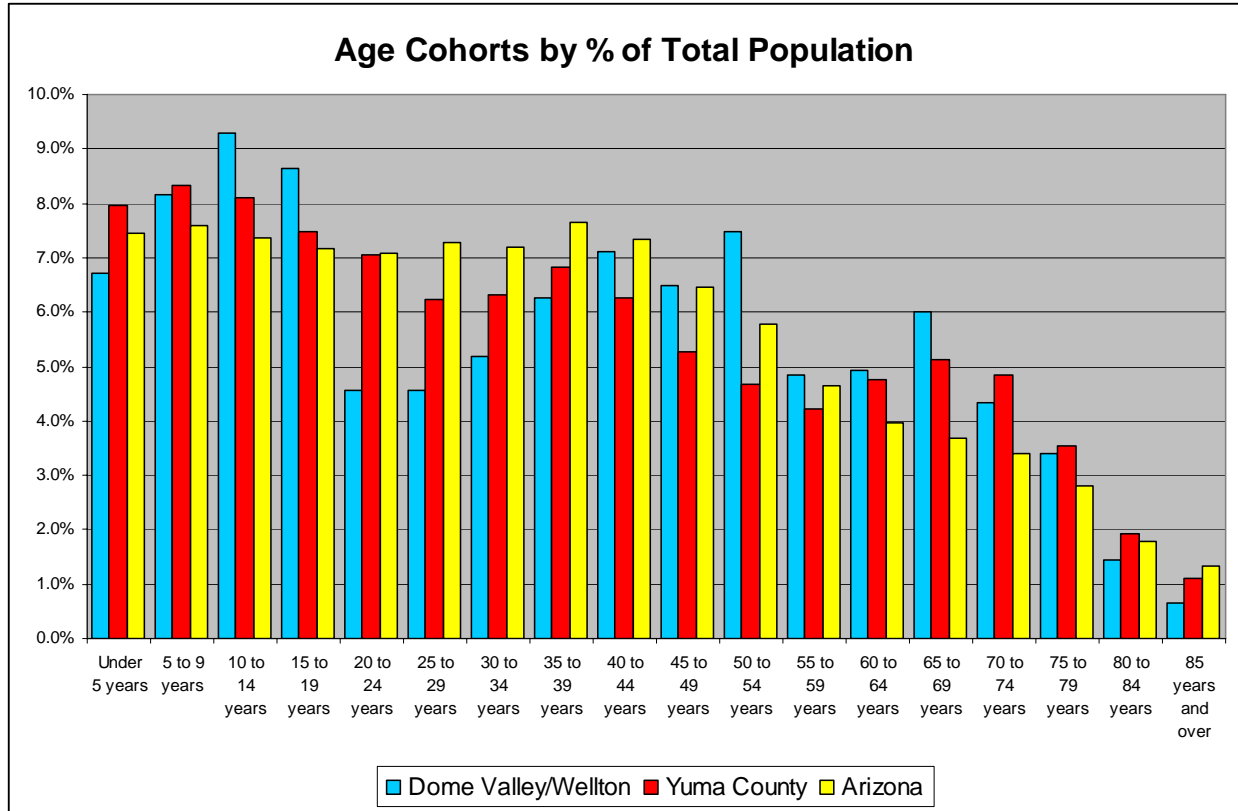


Figure 31: Percent of Total Population by Age Cohort¹²

Ages	#
Under 5 years	218
5 to 9 years	265
10 to 14 years	302
15 to 19 years	281
20 to 24 years	148
25 to 29 years	148
30 to 34 years	169
35 to 39 years	204
40 to 44 years	231
45 to 49 years	211
50 to 54 years	243
55 to 59 years	158
60 to 64 years	160
65 to 69 years	195
70 to 74 years	141
75 to 79 years	111
80 to 84 years	47
85 years and over	21

Table 3: Population by Age Groups
Dome Valley/Wellton ¹²

Figure 29 depicts the percentage of a given area’s population contained in 5-year age cohorts. Compared to Yuma County and the State of Arizona as a whole, the Dome Valley/Wellton Planning Area has a much smaller percentage of its population in the 20 to 24 and 25 to 29 years old cohorts. Conversely, the Dome Valley/Wellton Planning Area has a higher percentage of its population in the cohorts covering ages 10 to 19 than Yuma County and the State of Arizona as a whole. This seems to indicate as children in the Dome Valley/Wellton Planning Area turn 18 and reach adulthood, a significant number of them are choosing to leave the Dome Valley/Wellton Planning Area. The likely reason for this is the lack of higher educational opportunities and limited employment options in the Dome Valley/Wellton Planning Area.

¹² 2000 U.S. Census

Dome Valley/Wellton Planning Area Background Study
 Demographics

Minutes	Number of Commuters
>5	141
5 to 9	207
10 to 14	165
15 to 19	106
20 to 24	128
25 to 29	31
30 to 34	108
35 to 39	12
40 to 44	11
45 to 59	45
60 to 89	27
90+	9

Table 4: D.V.W. Commute Times¹³

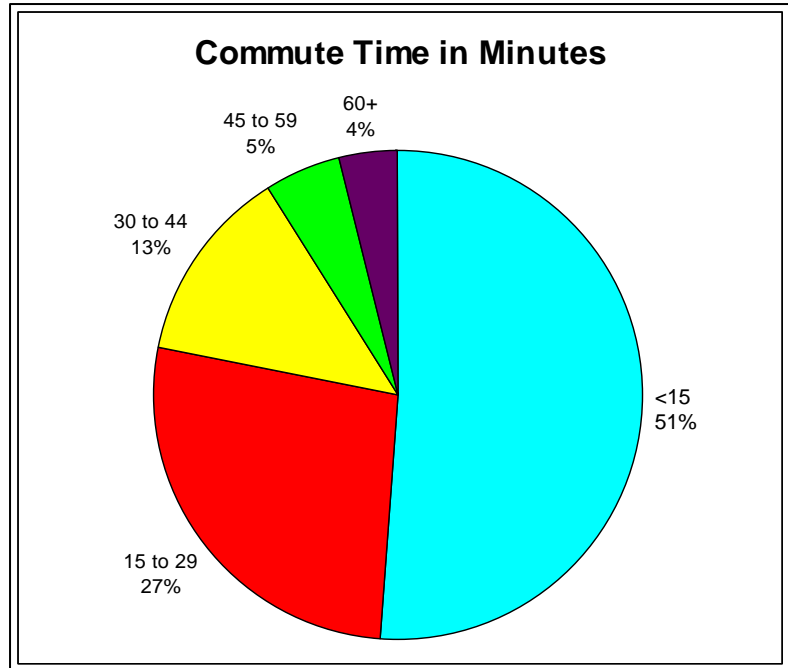


Figure 32: Dome Valley/Wellton Length of Commutes¹³

The data above indicates that most people living in the Dome Valley/Wellton Planning Area have very short commutes. Fifty-one percent have a commute of less than 15 minutes and 78% have a commute of less than 30 minutes. This indicates that most residents are finding jobs within the planning area. Eighteen percent have a commute of 31 minutes to one hour. It is likely that these people are commuting to the more urbanized areas of Yuma County west of the Gila Mountains.

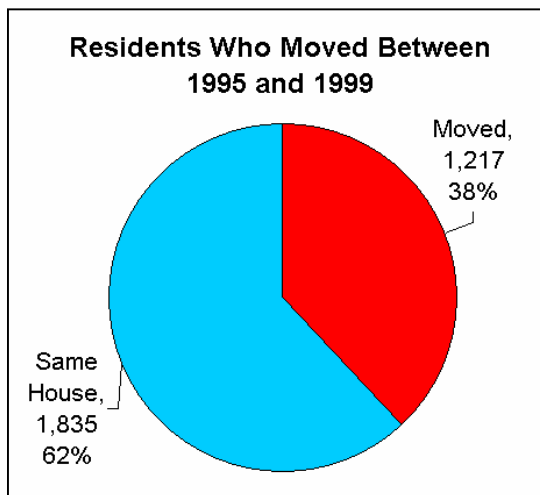


Figure 33: D.V.W. Movers¹⁰

Forty-four percent of people who moved relocated from outside of Yuma County. Of these people, 15% relocated from elsewhere in Arizona, 50% from other Western states, and 18% from foreign countries.

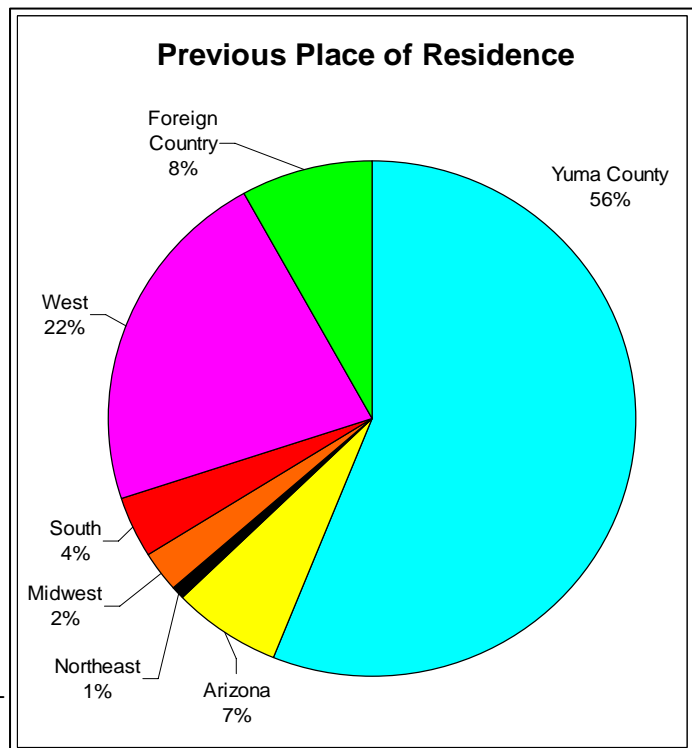


Figure 34: Dome Valley/Wellton Length of Commutes¹³

¹³ 2000 U.S. Census

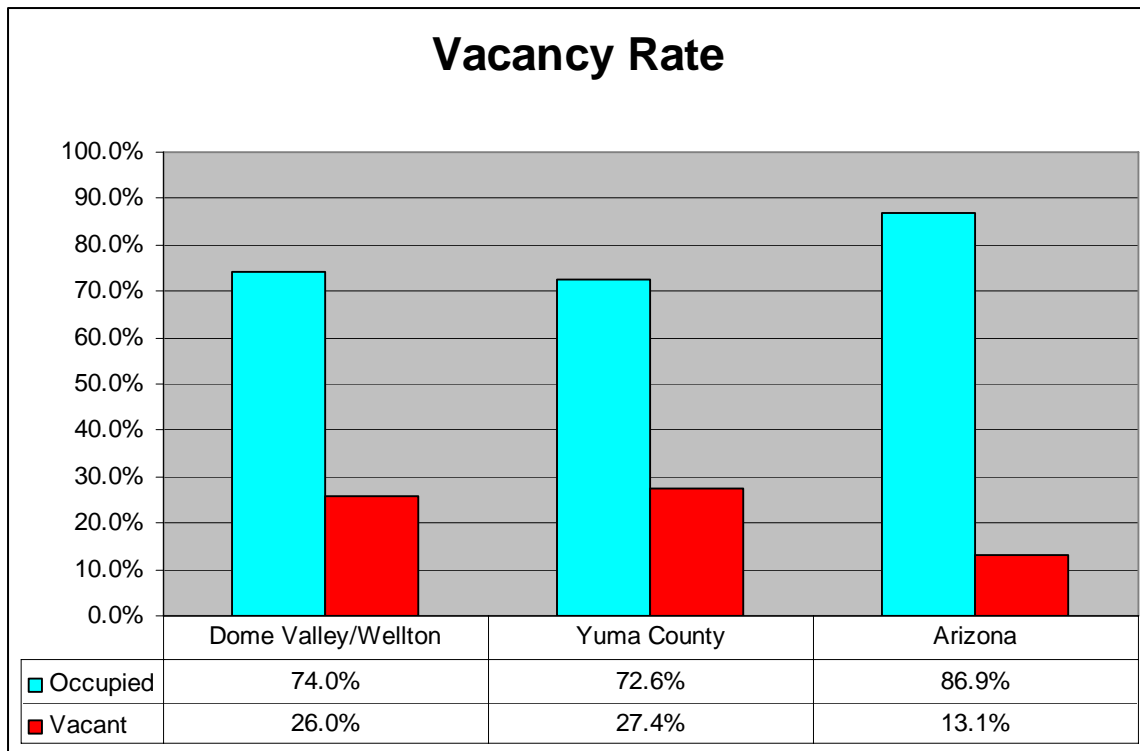


Figure 35: Vacancy Rate¹¹

The owner occupancy rate for the Dome Valley/Wellton Planning Area is 74%. This compares to rates of 72.3%, and 68% in Yuma County and Arizona as a whole. The owner occupancy rate in the planning area is higher but not significantly so.

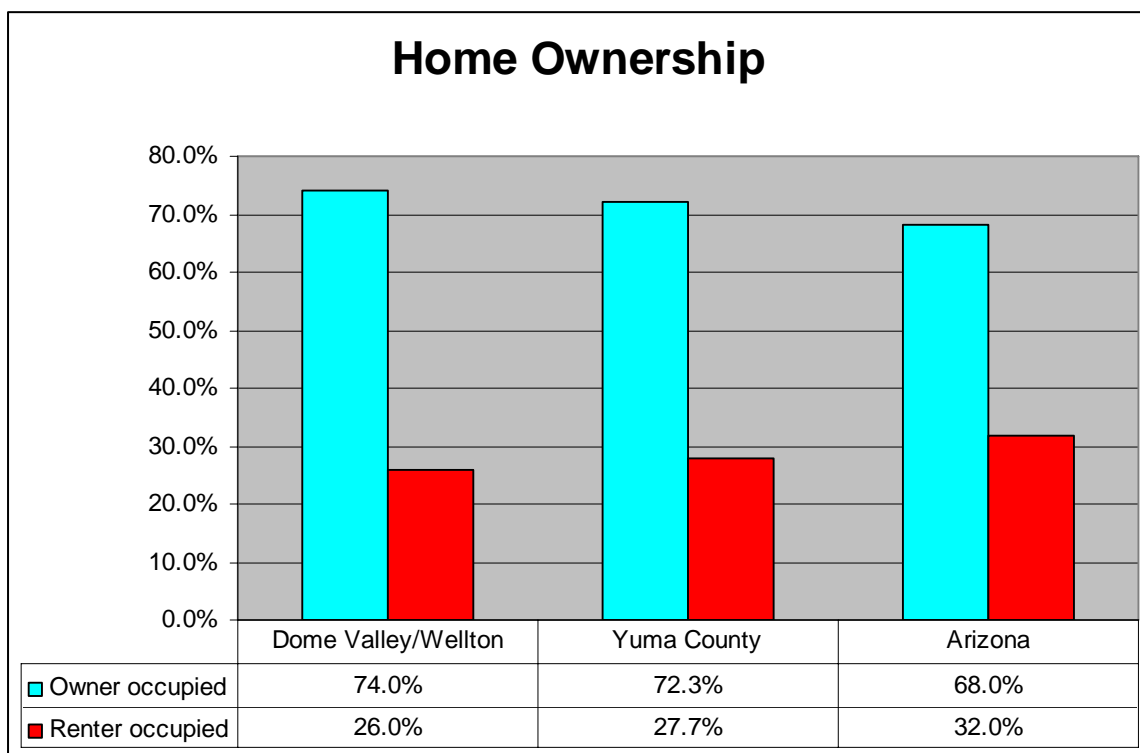
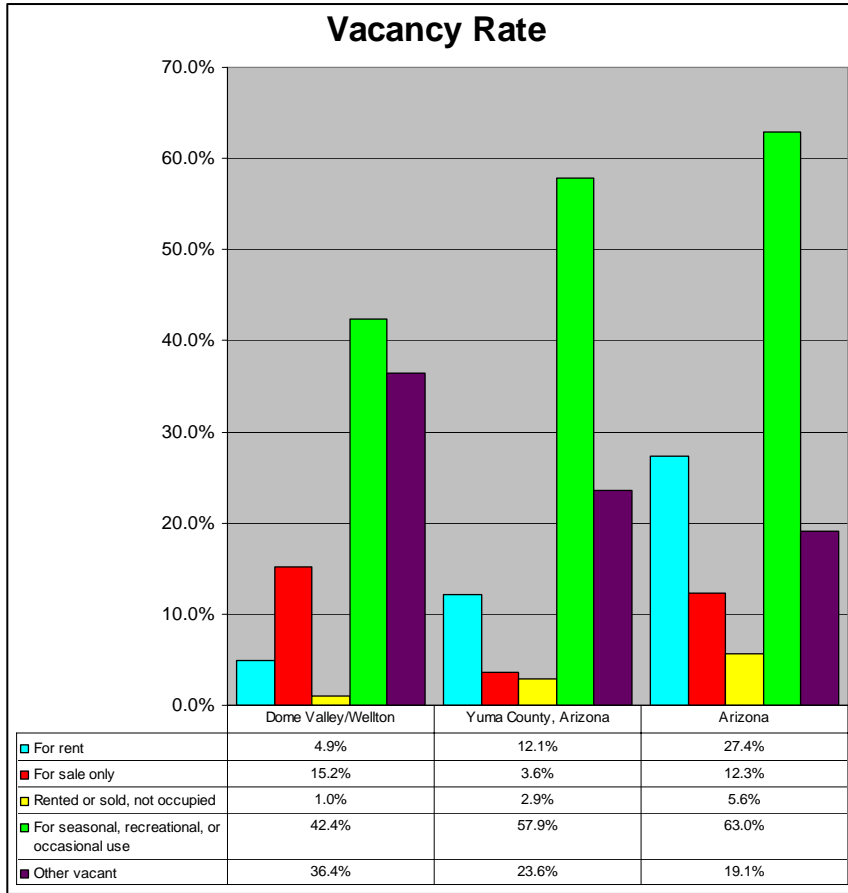


Figure 36: Home Ownership¹¹

¹¹ 2000 U.S. Census



The vacancy rate in the Dome Valley/Wellton Planning Area was 27%, which is not significantly different than the vacancy rate for all of Yuma County. Both the planning area and Yuma County have a vacancy rate that is approximately double that found in the State as a whole. This gap may be explained by the larger number of seasonal residents in the planning area and Yuma County. The Dome Valley/Wellton Planning Area has a higher percentage of its vacant housing units classified as “other vacant” than do Yuma County and Arizona. A possible explanation is that this housing is for seasonal agricultural workers.

Figure 37: Vacancy Rate by Type¹²

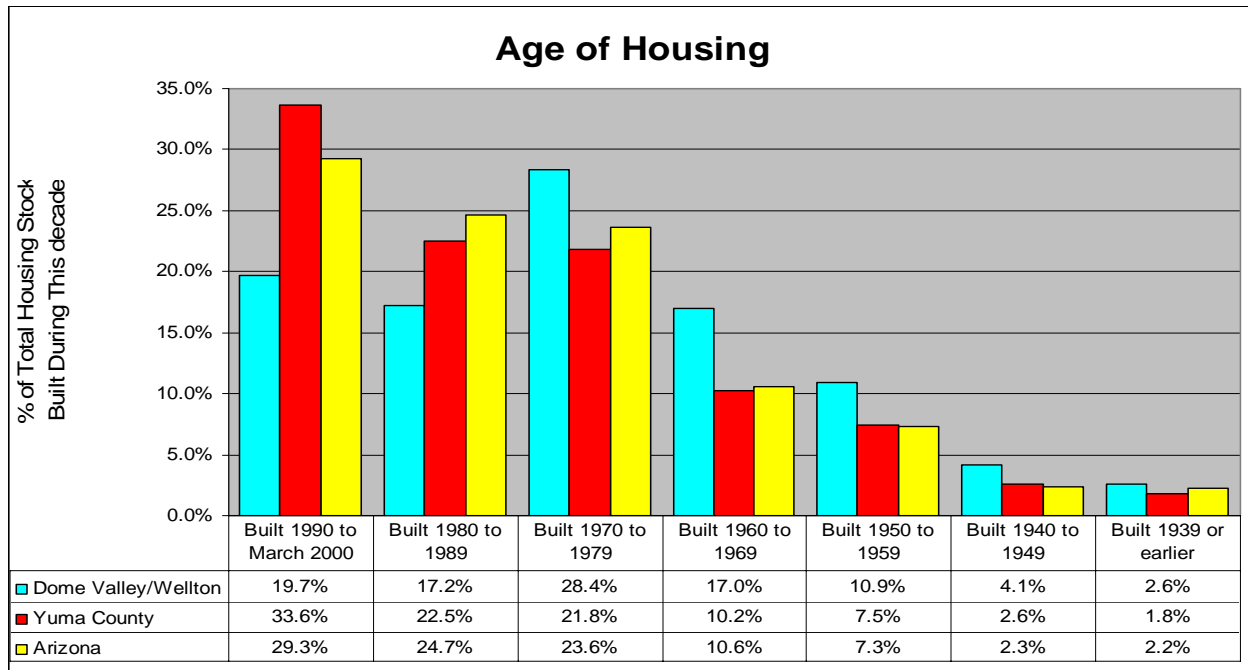


Figure 38: Age of Housing Stock¹²

¹²2000 U.S. Census

Dome Valley/Wellton Planning Area Background Study

Housing

As illustrated in Figure 36, the housing stock in the Dome Valley/Wellton Planning Area is older than that found in Yuma County and Arizona as whole. The Dome Valley/Wellton Planning Area saw a greater percentage of its housing stock constructed between 1970 and 1979 than any other decade. Both Yuma County and Arizona, as a whole, saw the greatest part of their housing stock constructed between 1990 and March of 2000. For every decade prior to the 1970's, a greater percentage of the Dome Valley/Wellton Planning Area housing stock was constructed than was in Yuma County and Arizona as a whole.

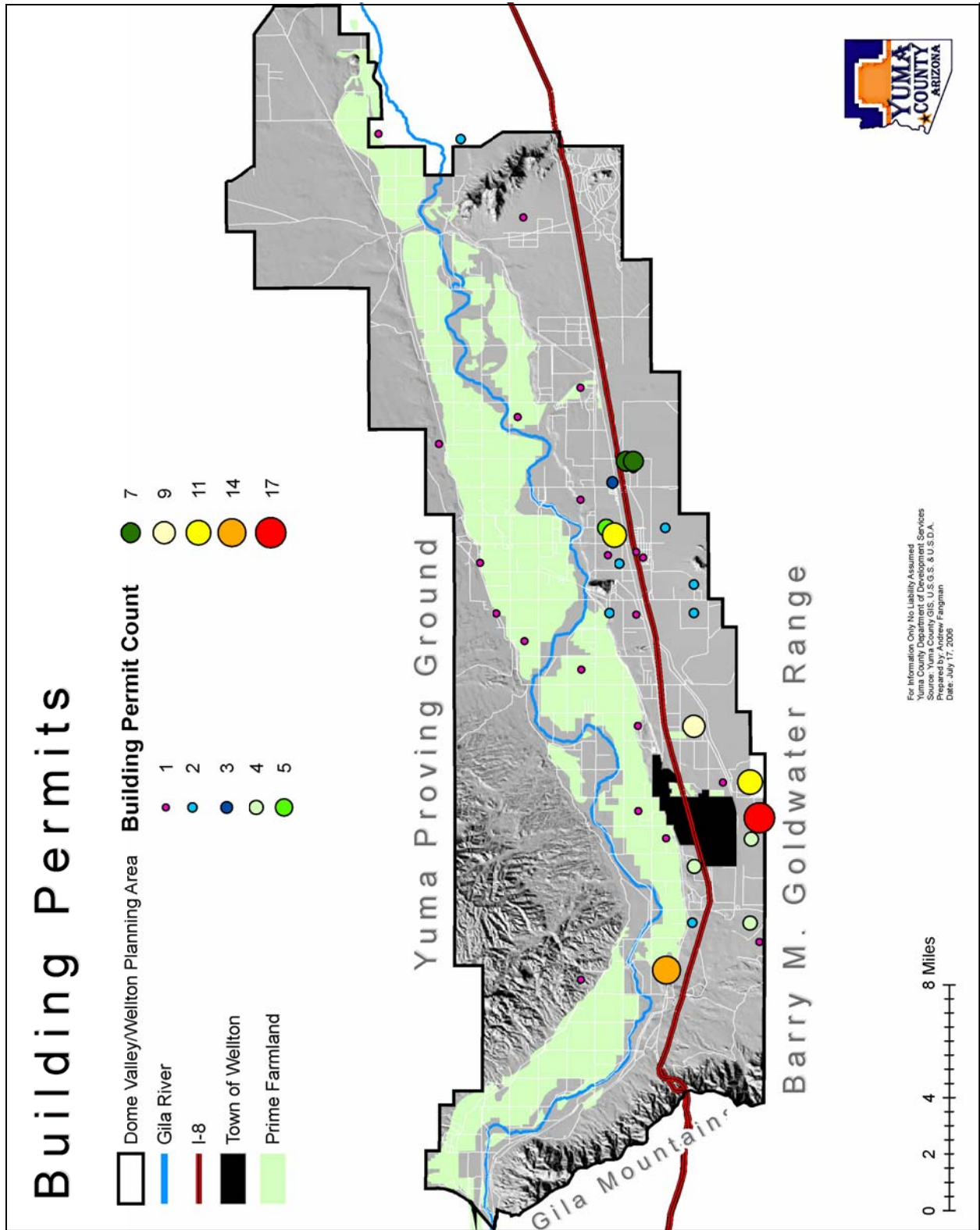


Figure 39: Residential Building Permits Issued, 1999 to 2006

Dome Valley/Wellton Planning Area Background Study
Housing

Figure 37 (preceding page) depicts all residential building permits (single family home, manufactured home, and mobiles home) that were issued between May 1, 1999 and July 14, 2006 in the Dome Valley Wellton Planning Area. Data from the first 4 months of 1999 was included in 2000 Census. July 14, 2006 was the latest available date for building permit information. In total, an additional 246 housing units were built/placed. This is a average rate of 36 housing units constructed per year. At the average Dome Valley/Wellton Planning Area household size of 2.826, this new housing would accommodate 695 people. Of the housing units constructed , 98% (240) were constructed on land that is not designated as prime farmland by the United State Department of Agriculture. In Chapter 3 of the Yuma County 2010 Comprehensive Plan, the first listed goal (page 3-10) for the Dome Valley/Wellton Planning Area is the preservation of farmland. With all but a small handful of new housing units off of prime farmland, this goal has been successful achieved.

	Single Family	Manufactured Homes	Mobile Homes	Total
1999*	2	11	9	22
2000	14	20	3	37
2001	5	16	3	24
2002	7	27	6	40
2003	4	16	4	24
2004	6	18	8	32
2005	8	27	11	46
2006**	5	13	4	22
Total	51	148	48	247

Table 5: Type of Residential Building Permits Issued
* 5-1-99 through 12-31-99 ** 1-1-06 through 7-14-06

The predominate type of housing constructed/installed between May 1, 1999 and July 14, 2006 was manufactured homes. Sixty percent of new housing units constructed/installed were manufactured homes, 21% were site-built, single family homes, and 19% were mobile homes. Mobile homes are defined as a structure built on or prior to June 15, 1976, on a permanent chassis, but does not include recreational vehicles and factory-built buildings. Both the number of permits issued and the proportion of types of permits issued have held relatively constant between 1999 and 2006. There have been some slight annual fluctuations but there has been no dramatic changes.

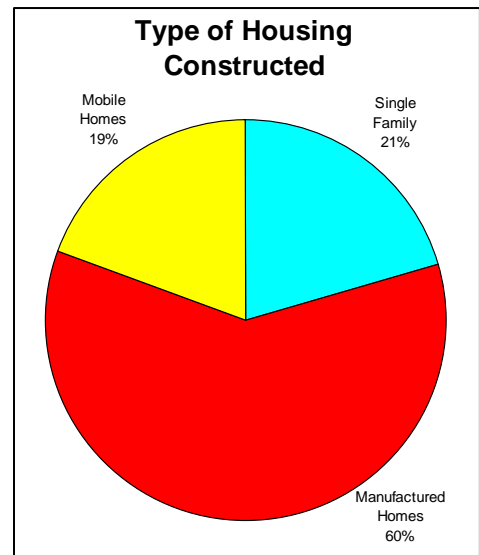


Figure 40: Type of Housing Constructed

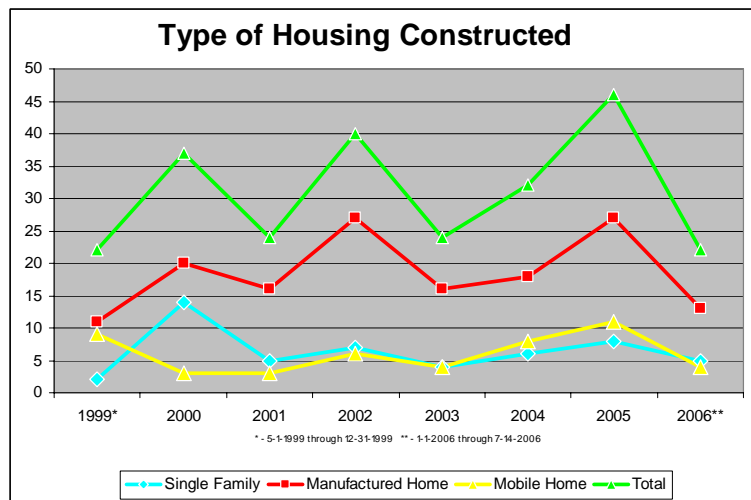


Figure 41: Type of Housing Constructed by Year

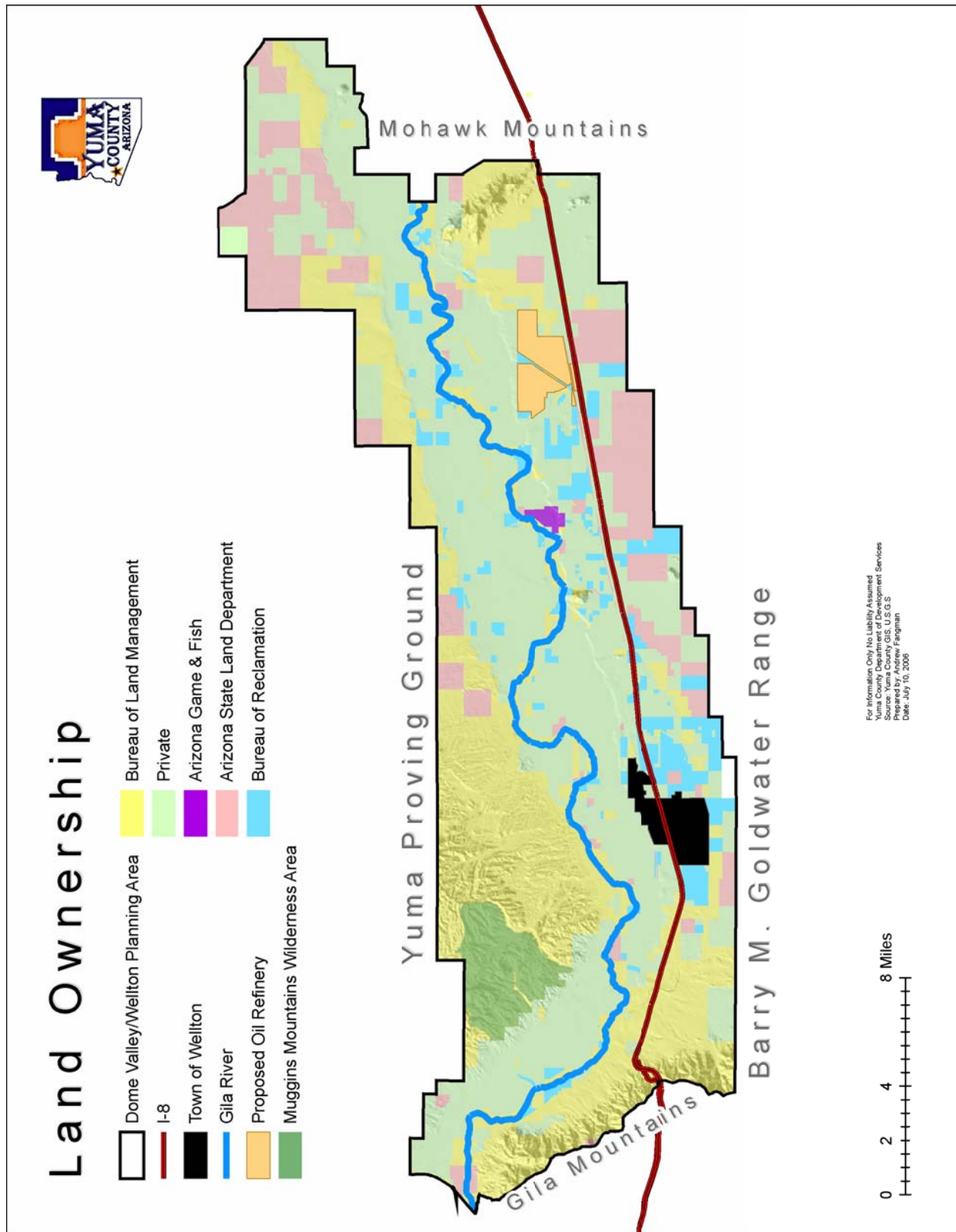


Figure 42: Land Ownership

Dome Valley/Wellton Planning Area Background Study

Land Ownership

Land Owner	Square Miles
Bureau of Land Management	67
Private	189
Arizona State Land Dept.	47
Bureau of Reclamation	86
Muggins Mtns. Wilderness Area	12
Arizona Game & Fish	0.84

Table 6: Land Ownership

Privately owned lands make up 189 square miles (47%) of the Dome Valley/Wellton Planning Area. The Bureau of Reclamation (BoR) is the largest governmental landowner in the area with 86 square miles (21.4%). The Arizona State Land Department owns 47 square miles (11.7%). The Bureau of Land Management owns 79 square miles (19.7%). Of this, 12 square miles are contained in the Muggins Mountains Wilderness Area. The Muggins Mountains Wilderness Area is managed by the BLM, under a different set of regulations from all of the other BLM lands so it is shown in its own category.

Land owned by the Arizona State Land Department (ASLD) should be considered as developable. Development or private economic activity can take place on these lands through auctions or lease processes. The ASLD is the management agent for these lands. The State pursues those projects that bring the greatest benefits to its beneficiaries, namely public schools. Counting privately-held land and state land, 236 square miles (58.7%) of land in the planning area is potentially available for development.

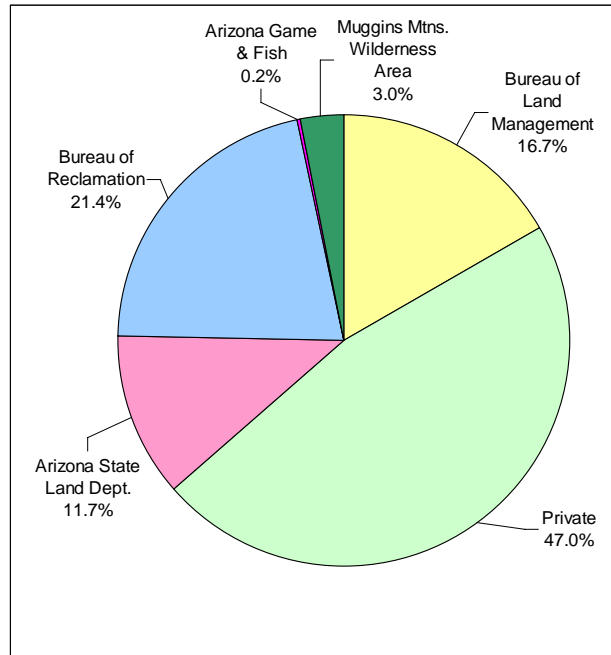


Figure 43: Land Ownership in the D.V.W. Planning

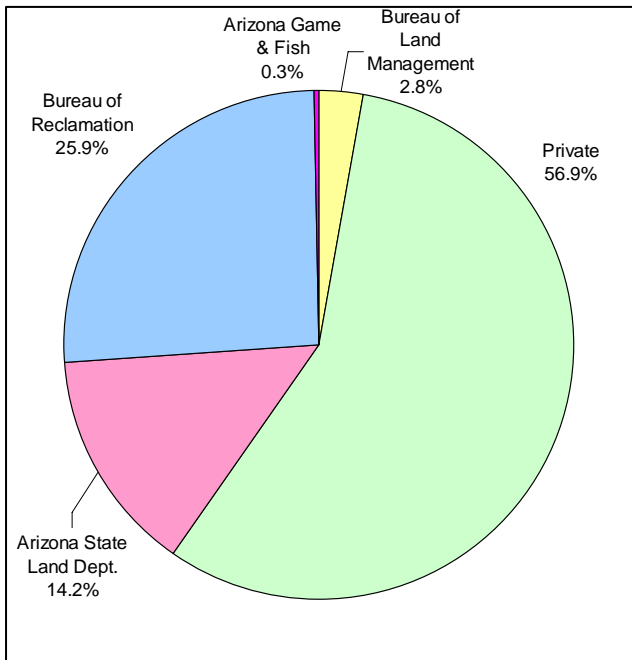


Figure 44: Land Ownership Less Mountainous Areas

The significant portion of land controlled by the Bureau of Land Management are areas too mountainous to develop or to be used for agricultural purposes. The Gila, Muggins, and Mohawk Mountains comprise approximately 58 square miles of the Dome Valley/Wellton Planning Area, all controlled by the BLM. These lands should be excluded when analyzing the ownership of potentially developable land. Of land that is developable, 56.9% is privately owned, an additional 14.2% is owned by the Arizona State Land Department. In total, 71.7% of potentially developable land is controlled by non-federal entities and, as such, can be considered available for development. This figure will grow to 97% when the Wellton-Mohawk Irrigation & Drainage District completes its acquisition of all Bureau of Reclamation properties.

Dome Valley/Wellton Planning Area Background Study
Land Ownership

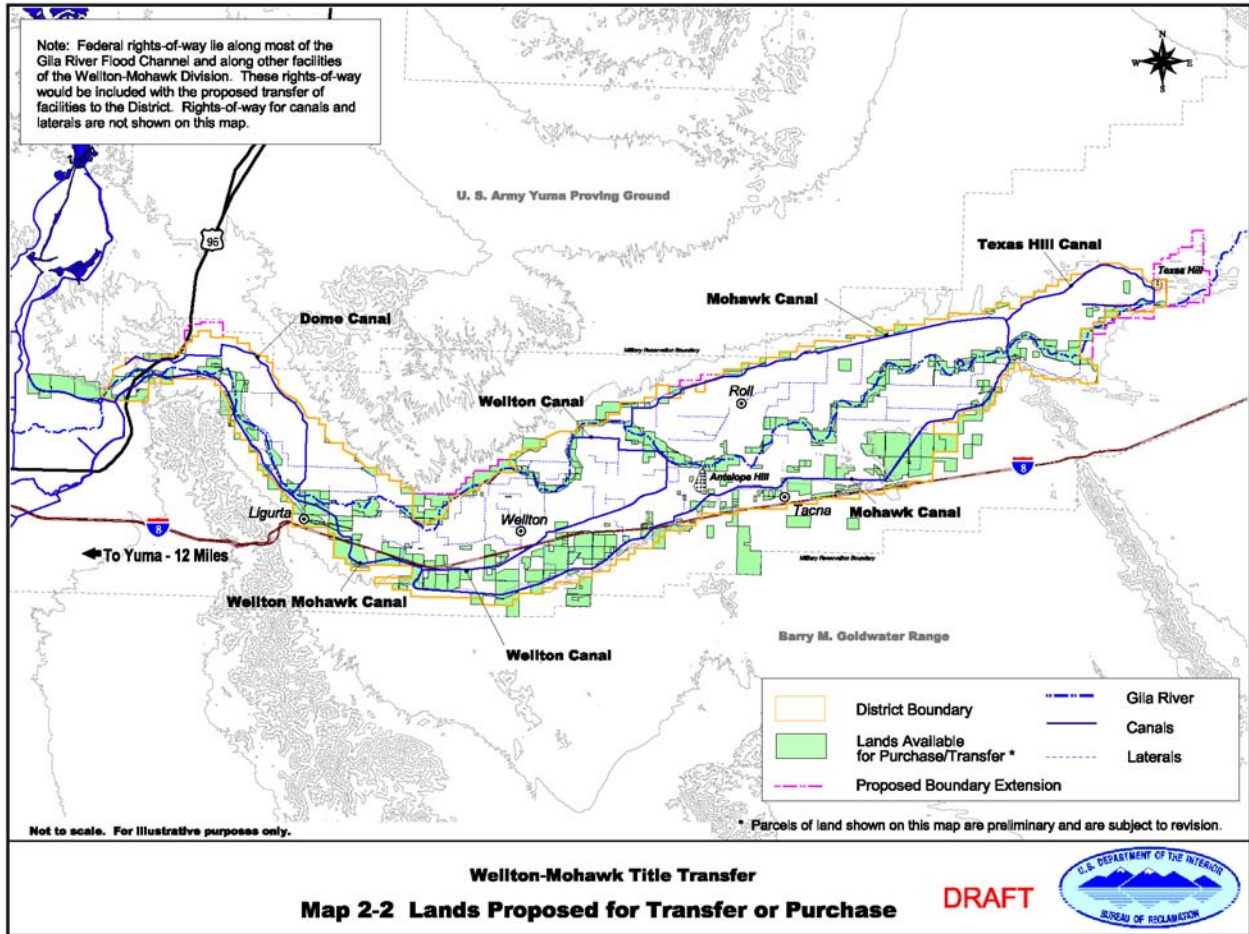


Figure 45: Lands Included in the Wellton-Mohawk Title Transfer Act¹³

On June 20, 2000 Congress passed the Wellton-Mohawk Title Transfer Act. This act authorizes the Secretary of the Interior to sell certain works, facilities and lands of the Gila Project, including designated acquired public and withdrawn lands within or adjacent the Gila Project to the Wellton-Mohawk Irrigation and Drainage District. The Bureau of Reclamation land, totaling 57,418 acres, is being offered to WMIDD as shown above in Figure 43¹³.

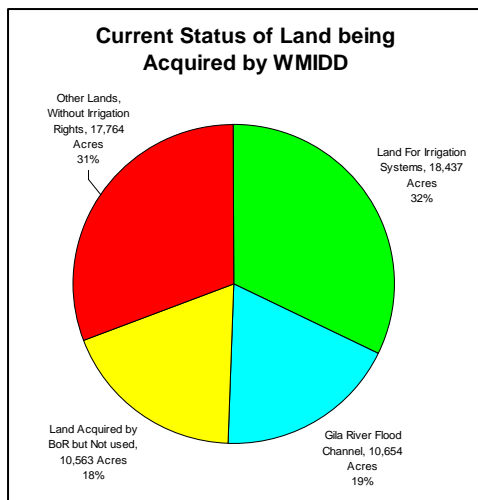


Figure 46: Current Status of Land¹³

Approximately 18,00 Acres of the lands to be acquired contains irrigation and drainage system rights-of-way, including irrigation and drainage systems and other facilities. Approximately 10,600 acres are within the Gila River Flood Channel. Land acquired but used is comprised of land obtained by the BoR from the forerunners of WMIDD, but that have not been used for rights-of-way or farm unit development. The Other Land category includes 7,839 acres the BoR acquired, and then rescinded the irrigation rights under the Salinity Control Act of 1974 and the Pima-Maricopa Indian Community Water Rights Settlement Act of 1988. A further 9,925 acres were withdrawn from the public domain in the 1940's for Division purposes but not used for rights-of-way or development of farm units. Some of this land was also stripped of its irrigation rights. Unlike the other categories, WMIDD would purchase these 17,764 acres at fair market value.¹³

Dome Valley/Wellton Planning Area Background Study
Land Ownership

According to the draft Environmental Impact Statement for the Wellton-Mohawk Title Transfer Act, “*approximately 9,800 acres of the undeveloped land to be acquired by the District is considered to be suitable for development over the next 30 years. Of that amount, approximately 1,400 acres of land within or adjoining existing farms may be made available for private purchase for agriculture-related purposes. These may include stack yards for hay, staging areas for harvesting equipment, and land to buffer adjacent developed areas.*”¹⁴

Although the land transfer is not yet completed, the first major proposal for use of such lands has been made. Arizona Clean Fuels Yuma has proposed the construction of a 150,000 barrel per day oil refinery on land that WMIDD is set to purchase from the Bureau of Reclamation. In 2004, Major Amendment 2004-PA-04 changed the land use designation on 3,313 acres Bureau of Reclamation land to Heavy Industrial. The actual footprint of the oil refinery, if constructed, would be much smaller. The remaining acreage is envisioned for development of ancillary industrial uses and as a buffer zone to surrounding agricultural and residential areas.

As of July of 2006, the land transfer had not yet occurred. A major step towards completing the land transfer occurred in August of 2003 when a draft Environmental Impact Statement (EIS) was completed. As part of the transfer process, the land in question is undergoing an archeological inventory. As of July of 2006, completion of the land transfer is targeted to take place sometime in the fall of 2006.

Dome Valley/Wellton Planning Area Background Study
 Amendments to the Comprehensive Plan

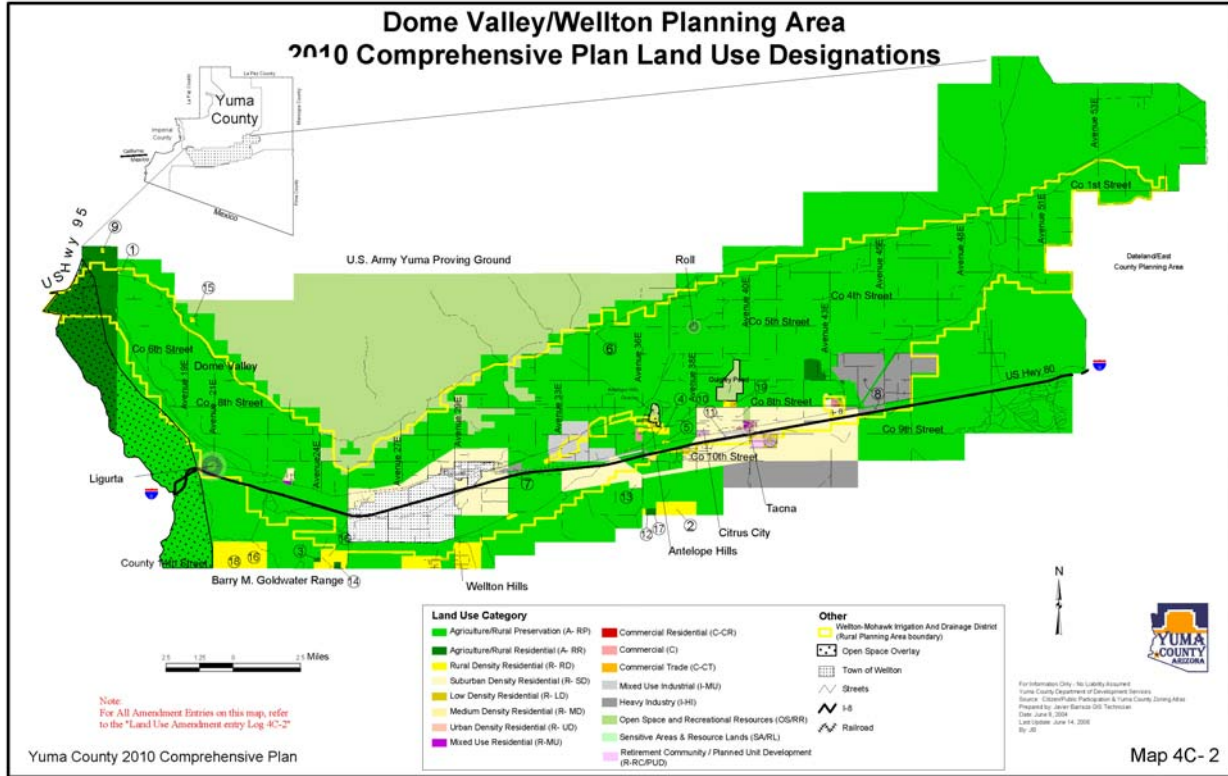


Figure 47 : 2010 Comprehensive Plan Land Use Designations

Changes to the Comprehensive Plan: 2001 to July of 2006

# on Map	AMENDMENT CASE #		AMENDMENT DATE	PREVIOUS PLAN DESIGNATION	NEW PLAN DESIGNATION
	MINOR	MAJOR			
1	2004-MA-04		6/15/04	A-RP	R-RD
2		2003-PA-02	1/28/04	A-RP	R-RD
3	2002-MA-01		1/6/04	A-RP	A-RR
4	2003-MA-18		12/31/03	A-RP	R-RD
5	2003-MA-25		3/4/04	A-RP	R-RD
6	2004-MA-13		No Date	A-RP	R-RD
7	2004-MA-10		8/11/04	R-SD / A-RP	I-HI
8		2004-PA-04	1/17/05	A-RP	I-HI
9	2004-MA-27		6/22/05	A-RR	R-RD
10	2005-MA-14		8/10/05	A-RP	R-SD
11	2005-MA-18		8/10/05	R-SD	I-MU
12	2005-MA-19		10/4/05	A-RP	R-RD & A-RR
13	2005-MA-23		11/30/05	A-RP	R-SD
14	2005-MA-22		12/22/05	A-RP	A-RR
15	2005-MA-20		11/30/05	A-RP	R-RD
16		2005-PA-06	1/11/06	A-RP	R-RD
17	2004-MA-24		3/15/06	A-RP	A-RR
18	2005-MA-36		6/2/06	A-RP	R-RD
19	2005-MA-09		6/9/06	A-RP	R-LD

Table 7: Amendments to the Comprehensive Plan 2001 to 2006

Dome Valley/Wellton Planning Area Background Study
 Amendments to the Comprehensive Plan

New Land Use Designation	Acres	Maximum Potential New Housing Units
Rural Density Residential (R-RD)	2,016.0	1,008
Agriculture/Rural Residential (A-RR)	85.0	9
Suburban Density Residential (R-SD)	101.9	204
Heavy Industrial (I-HI)	3,326.3	N.A.
Mixed Use Industrial (I-MU)	14.5	N.A.
Low Density Residential (R-LD)	40.0	240
Total	5,583.7	1,461

Table 8: Changes in Land Use Designation 2001 to 2006

Previous Use Designation	Acres
Agriculture/Rural Preservation (A-RP)	5,561.60
Suburban Density Residential (R-SD)	14.48

Table 9: Previous Land Use Designation

The land use designation of 5,543.7 acres in the Dome Valley/Wellton Planning Area were changed through amendments to the Comprehensive Plan from 2002 to 2006. Approximately 3,200 acres were designated to Heavy Industrial as part of the proposed oil refinery project. The change in land use designation on the remaining 2,216.6 acres could potentially allow for the construction of 1,461 new housing units, if rezoned, and then constructed at the maximum densities allowed for under the new land use designations. Under the original land use designations, only 183 housing units could be built at the maximum allowable density. There were no redesignations to any commercial land use designation. By a very large margin, the residential land use category that was most sought was Rural Density Residential (R-RD) which has a maximum density of one home per two acres. Nearly all land that was redesignated was from the A-RP classification to something else.

Land Use Category	Acres
Agriculture/Rural Preservation (A-RP)	105,600
Agriculture/Rural Residential (A-RR)	2,560
Rural Density Residential (R-RD)	3,264
Low Density Residential (R-LD)	154
Suburban Density Residential (R-SD)	5,952
Urban Density Residential (R-UD)	32
Retirement Community/Planned Unit Development (R-RC/PUD)	314
Mixed Use Residential (R-MU)	50
Commercial (C)	128
Heavy Industrial	2,176 ¹⁵
Mixed Use Industrial (I-MU)	1,728
Open Space & Recreational Resources (OS/RR)	1,024

Table 10: Current Land Use Designation of Privately Owned Lands

Land designated Agriculture/Rural Preservation (A-RP) makes up 86% of privately-owned land in the Dome Valley/Wellton Planning Area. This is consistent with agriculture being the dominant land use and economic activity in the area. The land with residential categories (R-RD, R-LD, R-SD & R-UD), if built out at the maximum allowed density, could accommodate 15,033 housing units. Currently there are 2,018 housing units in the Dome Valley/Wellton Planning Area.¹⁶

¹⁵ Does not include the 3,313 acres of Bureau of Reclamation land that is the site of the proposed oil refinery

¹⁶ Compiled from Census and building permit data

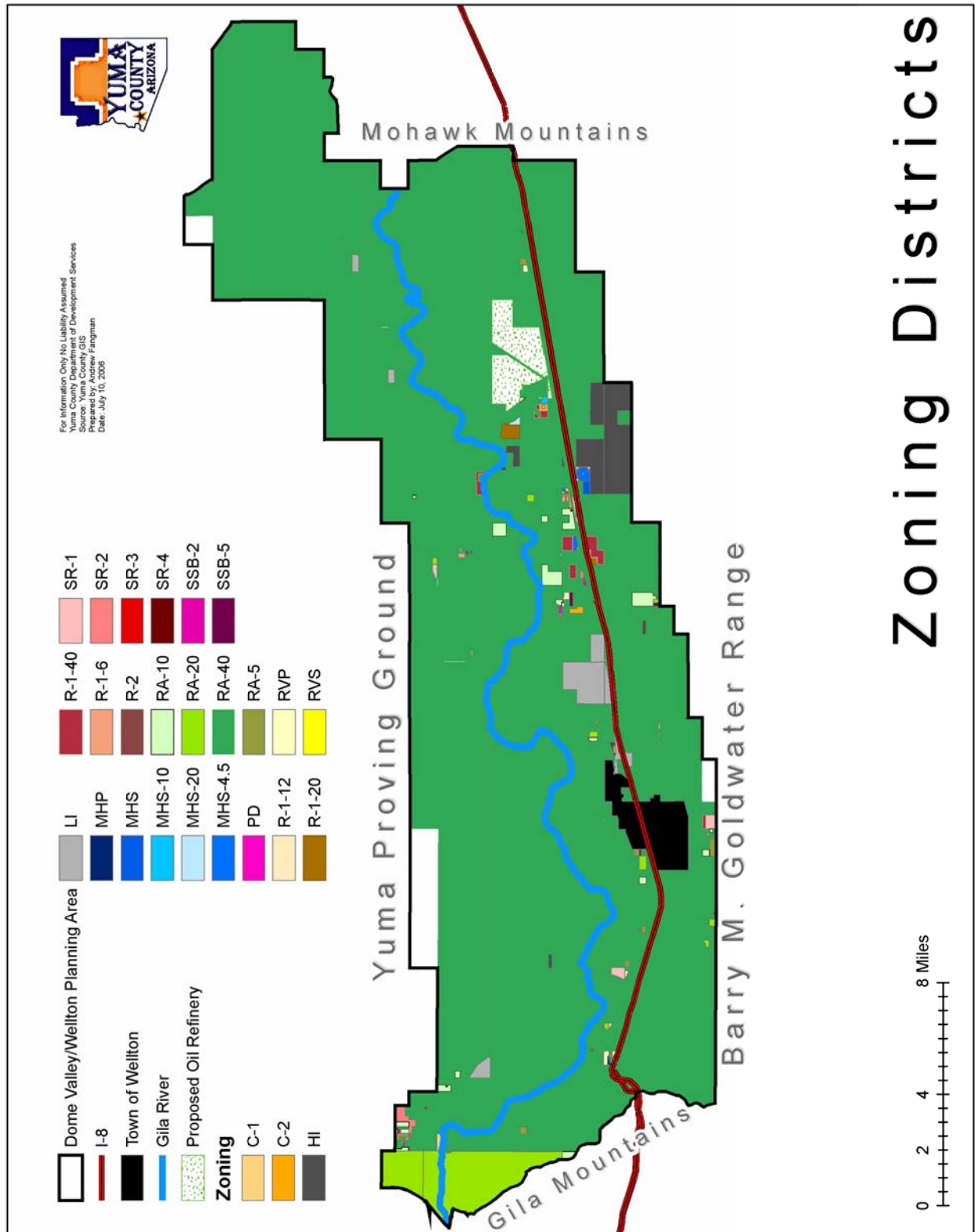


Figure 48: Zoning Districts in the Dome Valley/Wellton Planning Area

Dome Valley/Wellton Planning Area Background Study
Zoning

New Zoning	Acres	Maximum Potential New Housing Units
Heavy Industrial (HI)	19	N.A.
Light Industrial (LI)	133.5	N.A.
General Commercial (C-2)	30.7	N.A.
Planned Development (PD)	19.4	N.A.
Rural Area - 20 Acre Minimum (RA-20)	59.3	3
Rural Area - 10 Acre Minimum (RA-10)	78.6	6
Rural Area - 5 Acre Minimum (RA-5)	48	9
Suburban Site Built - 5 Acre Minimum (SSB-5)	40	8
Suburban Ranch - 2 Acre Minimum (SR-2)	80.8	40
Suburban Site Built - 1 Acre Minimum (SSB-1)	80	80
Manufactured Home Subdivision - 20,000 Square Foot Minimum (MHS-20)	50	109
Low Density Residential - 8,000 Square Foot Minimum (R-1-8)	19.6	107
Total	608.9	362

Table 11: Zoning Changes 2000 to 2005

Previous Zoning	Acres
Rural Area - 40 Acre Minimum (RA-40)	574
Rural Area - 10 Acre Minimum (RA-10)	2
Rural Area - 5 Acre Minimum (RA-5)	2
Low Density Residential - 8,000 Square Foot Minimum (R-1-8)	5.7
Low Density Residential - 8,000 Square Foot Minimum (R-1-8)/General Commercial (C-2)	13.1

Table 12: Previous Zoning

A total of 608.9 acres were rezoned in the Dome Valley/Wellton Planning Area from 2000 to 2005 with 66% of this acreage rezoned to residential districts. The maximum potential new housing units in these newly rezoned areas is 362 housing units. Prior to these rezonings, 45 housing units could have been constructed on the same parcel. This represents a potential increase of up to 317 housing units.

Of the 362 potential new housing units, 81% of them are located in zoning districts with a maximum lot size of 1 acre or less. Of the potential new housing units, 46% are located in a zoning district that allows for manufactured housing.

Of properties rezoned, 94% were previously zoned RA-40. This reflects the trend of the vast majority of land use reclassifications being from Agriculture/Rural Preservation, which only allows RA-40 zoning.

Since 2000, 274 housing units have been constructed in the Dome Valley/Wellton Planning Area. In the same time period, zoning changes could allow for the construction of up to 317 more housing units. Amendments to the Comprehensive Plan could allow for the construction of up to 1,298 additional housing units. Speculation on future housing needs is driving changes to the Comprehensive Plan within the Dome Valley/Wellton Planning Area, rather than the current demand for housing,.

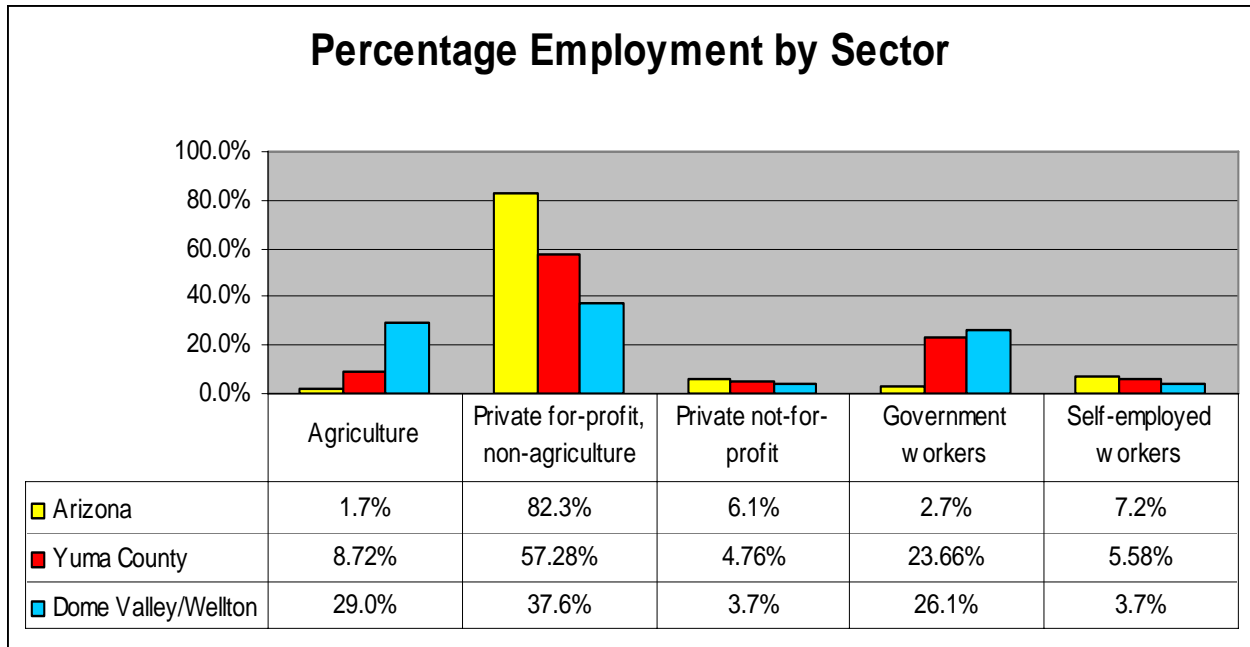


Figure 49: Employment by Sector¹⁷

Type of Employer	# of Employees
Agriculture	300
Private for-profit, non-agriculture	389
Private not-for-profit	38
Government workers	270
Self-employed workers	38

Table 13: Employment by Sector, Dome Valley/Wellton¹⁷

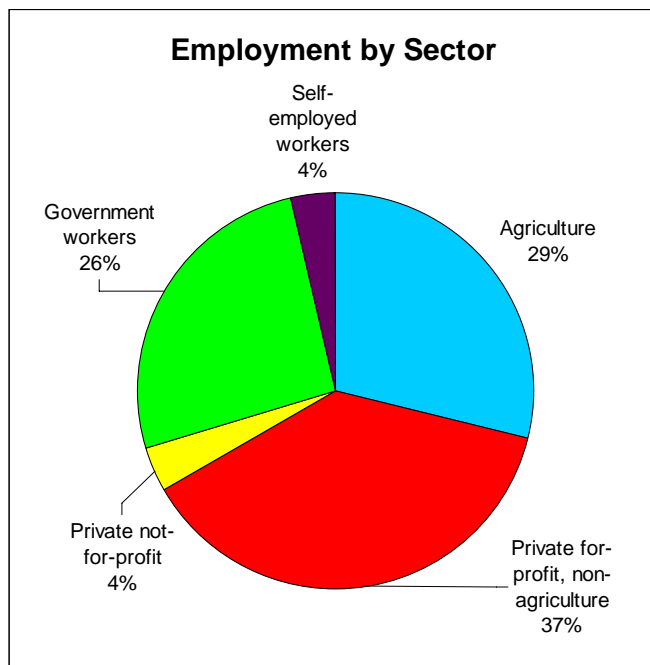


Figure 50: Employment by Sector, Dome Valley/Wellton¹⁷

Figure 47 compares the percentage of employment by sector. In the agricultural sector a fact highlighted very well is that, proportionately, more residents of the planning area work there. The percentage of agricultural workers in the planning area is three times higher than Yuma County as a whole and 17 times greater than the statewide percentage. The far smaller percentage of residents of the planning area work in the private, for profit non-agriculture sector likely indicating that employment in this sector is limited to basic, community support industries, i.e., gas stations, stores, etc, and businesses that support the agriculture sector. A far greater proportion of both Yuma County and the Dome Valley/Wellton Planning Area employees work in the governmental sector than do residents of the State of Arizona as a whole.

¹⁷ 2000 U.S. Census

Dome Valley/Wellton Planning Area Background Study
Employment

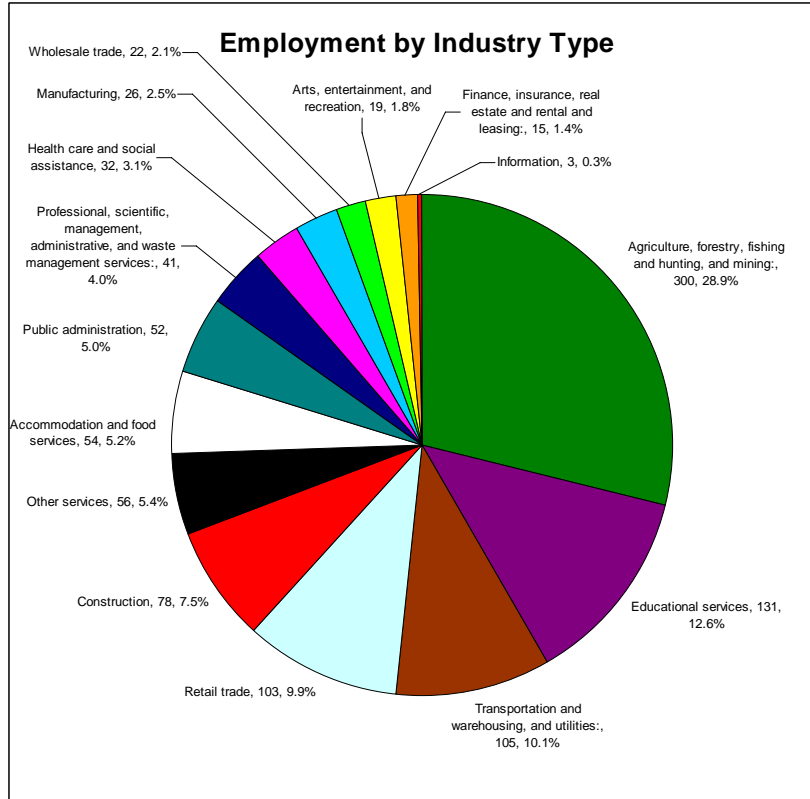


Figure 51: Employment by Industry, Dome Valley/Wellton²⁰

Total Workers	1,037
Agriculture, forestry, fishing and hunting, and mining:	300
Agriculture, forestry, fishing and hunting	297
Mining	3
Construction	78
Manufacturing	26
Wholesale trade	22
Retail trade	103
Transportation and warehousing, and utilities:	105
Transportation and warehousing	48
Utilities	57
Information	3
Finance, insurance, real estate and rental and leasing:	15
Finance and insurance	9
Real estate and rental and leasing	6
Professional, scientific, management, administrative, and waste management services:	41
Professional, scientific, and technical services	21
Management of companies and enterprises	0
Administrative and support and waste management services	20
Educational, health and social services:	163
Educational services	131
Health care and social assistance	32
Arts, entertainment, recreation, accommodation and food services:	73
Arts, entertainment, and recreation	19
Accommodation and food services	54
Other services (except public administration)	56
Public administration	52

Table 14: Employment by Industry, Dome Valley/Wellton²⁰

Figure 52 clearly illustrates that agriculture is the dominate economic activity in the Dome Valley/Wellton Planning Area. Nearly 29% of employed planning area residents work in the agricultural industry. The next three largest industry types - educational services (12.6%); transportation and warehousing, and utilities (10.1%); and retail trade (9.9%) can all be classified secondary, service sector industries which support agriculture the main economic activity in the area. Other industries, such as manufacturing; construction; and finance, insurance and real estate, serve as primary industries in other locations. These employ only a small percentage of people in the planning area. If and when construction begins on an oil refinery, a radical shift in employment, by industry type, will take place. Initially, construction jobs and places to live for construction personnel will be established. These will be followed by operational and manufacturing personnel which will become major components of the area's economy. Employment within support and peripheral industries will enhance this effect.

The data presented on this page comes from the 2000 Census. Despite its relative age, this data remains the best available. No other source of employment data allows for the Dome/Valley Wellton Planning Area to be examined without including large areas that are not part of the planning area.

²⁰ 2000 U.S. Census

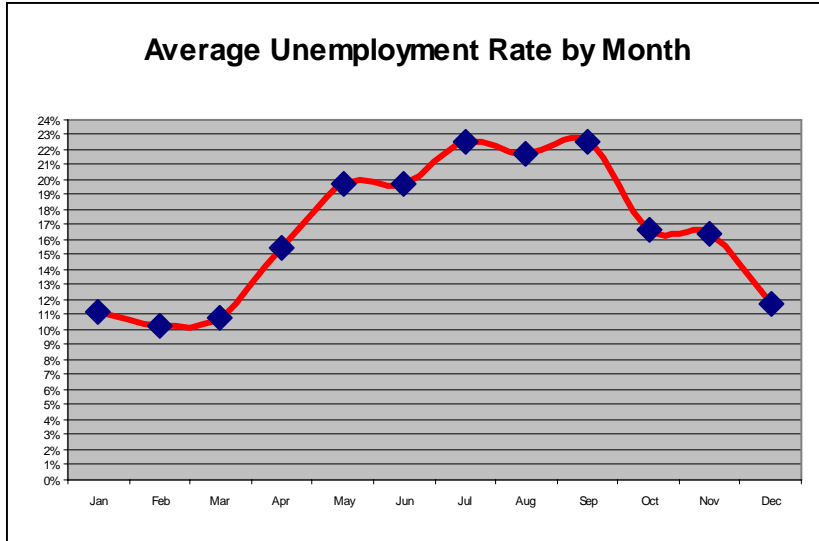


Figure 52: Average Monthly Unemployment Rate; Yuma County¹⁸

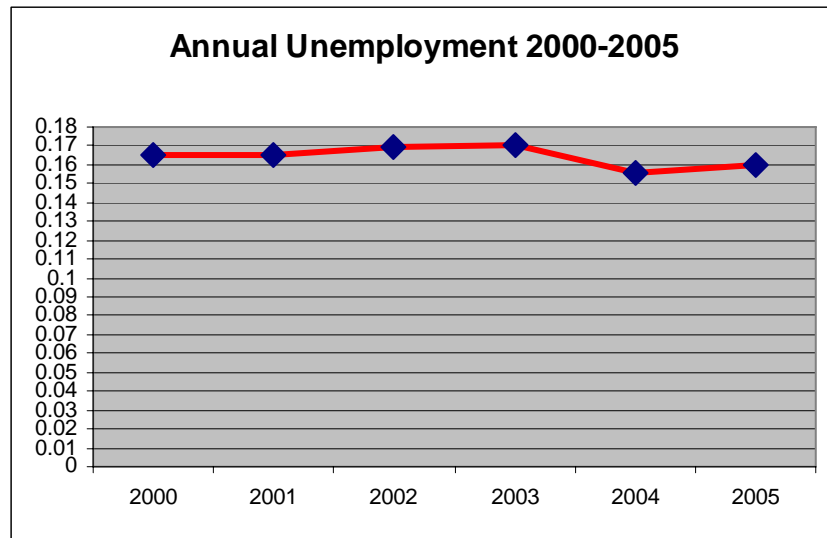


Figure 53: Annual Unemployment Rate: Yuma County¹⁸

Unfortunately, unemployment statistics for small geographic areas are not available. The smallest geographic area, for which unemployment statistics exist and still contain the Dome Valley/Wellton Planning Area, is Yuma County as a whole. However, some facts about unemployment for the Dome Valley/Wellton Planning Area can be gained from examining statistics on unemployment for all of Yuma County.

There are great seasonal fluctuations in the Yuma County unemployment rate. Figure 1 charts the monthly unemployment average from 2000 to 2005. Unemployment is at its lowest point in February and increases until it reaches a high point in July when it is nearly double that in February. These fluctuations are driven by the agricultural sector. Many jobs are created by harvesting, packing, and transportation operations from November through April. When unemployment is lowest during the peak of the vegetable growing season. Because agriculture is the major economic activity of the Dome Valley/Wellton Planning Area, these fluctuations are almost certainly a feature of the planning area's economy.

¹⁸ 2000 Bureau of Labor Statistics

Dome Valley/Wellton Planning Area Background Study
Income

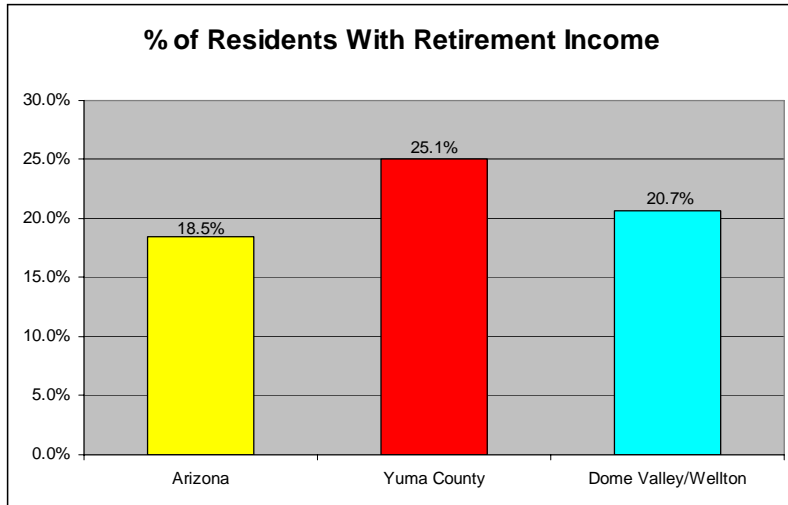


Figure 54: Percentage With Retirement Income¹⁹

Of planning area residents, 20.7% report having some retirement income. This is very close to the statewide figure of 18.5%. Yuma County as whole has 25.1% of residents reporting retirement income. It should be noted that these statistics only include full time residents. Winter visitors were not counted unless they declared Yuma County as their primary residence in the 2000 census. Official statistics on the number of winter visitors do not exist.

	Arizona	Yuma County	Dome Valley/Wellton
Less than \$10,000	8.6%	9.8%	10.2%
\$10,000 to \$14,999	6.4%	9.0%	9.0%
\$15,000 to \$19,999	6.7%	9.2%	7.3%
\$20,000 to \$24,999	7.2%	9.1%	8.8%
\$25,000 to \$29,999	7.0%	8.6%	10.8%
\$30,000 to \$34,999	6.9%	8.6%	9.2%
\$35,000 to \$39,999	6.4%	6.8%	6.0%
\$40,000 to \$44,999	5.9%	5.5%	6.0%
\$45,000 to \$49,999	5.2%	5.1%	7.4%
\$50,000 to \$59,999	9.1%	8.0%	7.1%
\$60,000 to \$74,999	10.1%	7.9%	6.6%
\$75,000 to \$99,999	9.7%	6.5%	7.0%
\$100,000 to \$124,999	4.7%	2.8%	2.5%
\$125,000 to \$149,999	2.2%	1.1%	0.8%
\$150,000 to \$199,999	1.9%	1.0%	0.3%
\$200,000 or more	2.0%	1.1%	0.8%

Figure 15: Percentage of Household by IncomeRange¹⁹

Income	Households
Total:	1,077
Less than \$10,000	110
\$10,000 to \$14,999	97
\$15,000 to \$19,999	79
\$20,000 to \$24,999	95
\$25,000 to \$29,999	116
\$30,000 to \$34,999	99
\$35,000 to \$39,999	65
\$40,000 to \$44,999	65
\$45,000 to \$49,999	80
\$50,000 to \$59,999	77
\$60,000 to \$74,999	71
\$75,000 to \$99,999	75
\$100,000 to \$124,999	27
\$125,000 to \$149,999	9
\$150,000 to \$199,999	3
\$200,000 or more	9

Table 16: Income by Household¹⁹

Households in both the Dome/Valley Wellton Planning Area and Yuma County, as a whole, are poorer than the State of Arizona as a whole. Of households in the planning area, 75% had an annual income of less than \$50,000, compared with 72% and 60% in Yuma County and Arizona as a whole. A similar trend is seen in the percentage of people living below the poverty line. In the planning area, 15.3% of households were counted as being below the poverty line compared with 15.8% in Yuma County and Arizona as a whole. Given the Dome Valley/Wellton Planning Area and Yuma County have a much higher unemployment rate than Arizona as whole, these statistics are not surprising.

¹⁹ 2000 U.S. Census

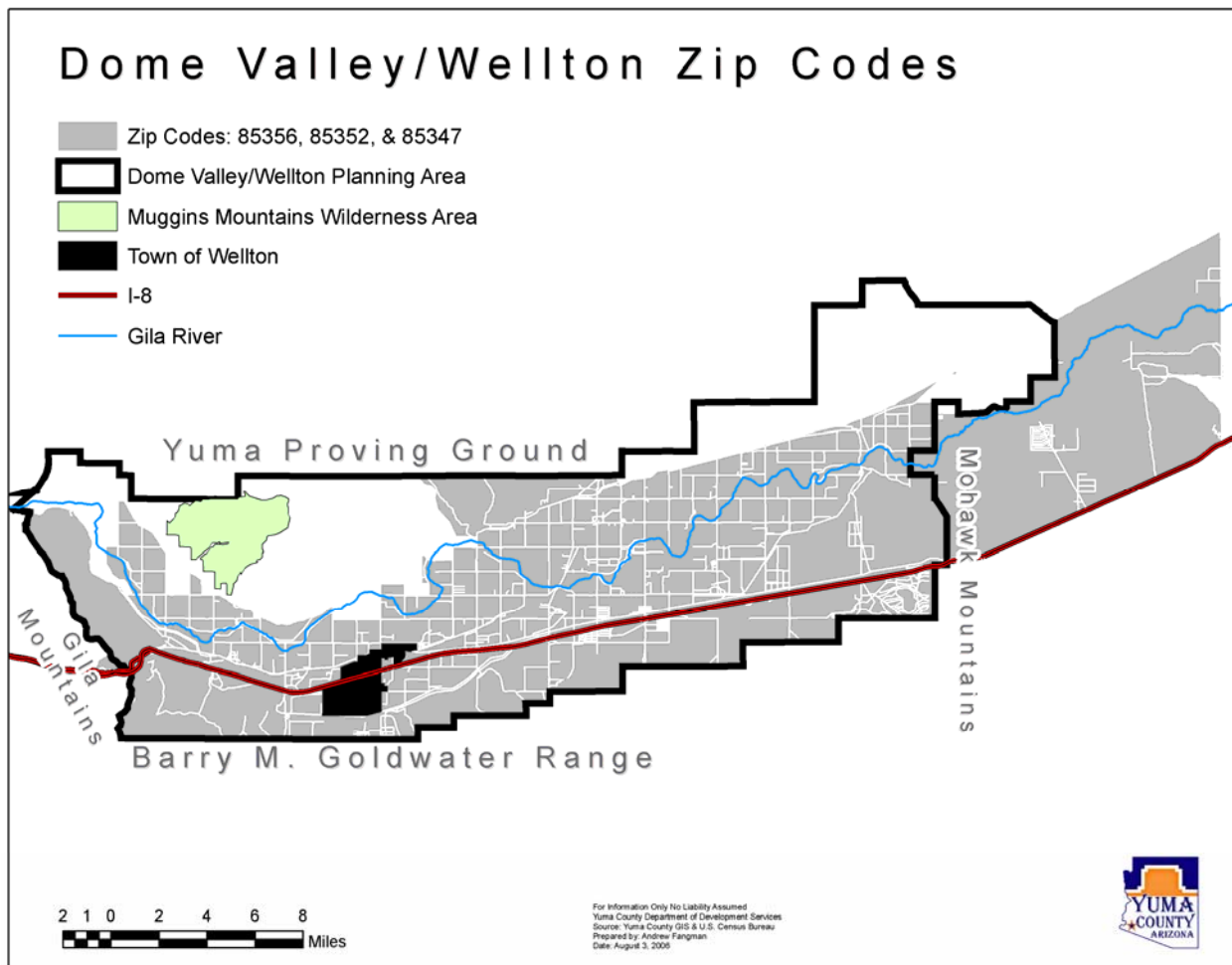


Figure 55: Zip Codes in the Dome Valley/Wellton Area

ZIP Code Business Patterns, produced by the U.S. Census Bureau, presents data on the total number of establishments, employment and payroll for more than 40,000 5-digit ZIP Code areas nationwide. Most ZIP Codes are derived from the physical location address reported in Census Bureau programs. The Internal Revenue Service provides supplemental address information. An establishment is a business or industrial unit at a single physical location that produces or distributes goods or performs services, for example, a single store or factory. The 2003 ZIP Code Statistics presents counts of establishments by size by detailed North American Industry Classification System (NAICS) by five-digit ZIP Codes in 8 of the 18 sectors covered in the NAICS. NAICS, developed in cooperation with Canada and Mexico, classifies North America's economic activities. These sectors include roughly 60 percent of establishments with paid employees. Only limited data is provided for ZIP Codes. Statistics for smaller areas are more frequently withheld to avoid disclosing information about individual firms. The ZIP Code Business Patterns does not include government-owned establishments, even when their primary activity would be classified in industries covered by the Census. Because of these exclusions, ZIP Code Business Patterns data for industries in many sectors might appear to be incomplete.²¹ The ZIP Code Business Patterns does not include farms or publicly owned establishments. Both of these employment sectors are major employers in the planning area. It also does not take into account workers who commute to jobs outside the planning area. Zip codes 85356, 85352, & 85347 provide nearly total coverage of the inhabited portions of the planning area, and only include a small, mostly vacant stretch of land east of the Mohawk Mountains. Data for the Town of Wellton, which is not part of the planning area, is included in the ZIP Code Business Patterns data because there was no way to disaggregate from the planning area.

²¹ 2000 U.S. Census

Dome Valley/Wellton Planning Area Background Study
 Employment

	# of Employees					
	Total # of Estab-lishments	1 to 4	5 to 9	10 to 19	20 to 49	50 to 99
All other outpatient care centers	1	0	1	0	0	0
All other personal services	1	1	0	0	0	0
Ambulance services	1	0	0	1	0	0
Automotive parts & accessories stores	2	1	1	0	0	0
Civic & social organizations	1	1	0	0	0	0
Com & industrial mach & equip (exec auto/elec)	1	0	0	1	0	0
Commercial banking	1	0	1	0	0	0
Commercial building construction	1	1	0	0	0	0
Cotton ginning	1	1	0	0	0	0
Credit unions	1	1	0	0	0	0
Crop harvesting, primarily by machine	1	1	0	0	0	0
Dry cleaning & laundry services	1	0	1	0	0	0
Farm machinery & equip merchant wholesalers	1	0	1	0	0	0
Farm supplies merchant wholesalers	2	2	0	0	0	0
Freight transportation arrangement	1	1	0	0	0	0
Full-service restaurants	5	1	2	2	0	0
Gasoline stations with convenience stores	2	0	2	0	0	0
General automotive repair	1	0	1	0	0	0
Grain & field bean merchant wholesalers	2	1	0	0	0	1
Hotels (except casino hotels) & motels	2	2	0	0	0	0
Janitorial services	1	0	1	0	0	0
Lessors of other real estate property	1	1	0	0	0	0
Motion picture & video production	1	1	0	0	0	0
Nursery, garden center, & farm supply stores	2	1	0	1	0	0
Offices of real estate agents & brokers	4	3	1	0	0	0
Other direct selling establishments	1	1	0	0	0	0
Other misc nondurable goods merchant wholesale	1	0	1	0	0	0
Other residential care facilities	1	0	0	0	1	0
Other support activities for road transportation	1	1	0	0	0	0
Post harvest crop activities (except cotton gin)	1	1	0	0	0	0
Poured concrete structure contractors	1	0	1	0	0	0
Ready-mix concrete manufacturing	1	0	1	0	0	0
Refrigerated warehousing & storage	1	0	1	0	0	0
Religious organizations	2	2	0	0	0	0
RV (recreational vehicle) parks & campground	2	1	1	0	0	0
Site preparation contractors	1	0	0	1	0	0
Soil preparation, planting, and plowing	2	2	0	0	0	0
Solid waste landfill	1	0	1	0	0	0
Specialized freight (except used goods)	2	2	0	0	0	0
Supermarkets & other grocery (convenience stores)	2	2	0	0	0	0
Supermarkets & other grocery (except convenience stores)	1	1	0	0	0	0
Tax preparation services	1	1	0	0	0	0
Tire dealers	1	1	0	0	0	0
Unclassified	1	1	0	0	0	0
Total	62	36	18	6	1	1

Table 17: Number of Business Establishments, Establishments Directly Related to Agriculture are Highlighted in Green²²

²² 2003 ZIP Code Business Patterns, U.S. Census Bureau

Dome Valley/Wellton Planning Area Background Study
 Employment

Industry Code Description	# of Employees					Total
	1 to 4	5 to 9	10 to 19	20 to 49	50 to 99	
Admin, support, waste management	0	2	0	0	0	2
Forestry, fishing, hunting, and agriculture	5	0	0	0	0	5
Professional, scientific & technical services	1	0	0	0	0	1
Accommodation & food services	4	3	2	0	0	9
Construction	1	1	1	0	0	3
Finance & insurance	1	1	0	0	0	2
Health care and social assistance	0	1	1	1	0	3
Information	1	0	0	0	0	1
Manufacturing	0	1	0	0	0	1
Other services (except public administration)	4	2	1	0	0	7
Real estate & rental & leasing	4	1	0	0	0	5
Retail trade	6	3	1	1	0	11
Transportation & warehousing	4	1	0	0	0	5
Unclassified establishments	1	0	0	0	0	1
Wholesale trade	3	2	0	0	1	6
Total	35	18	6	2	1	62

Table 18 Number of Establishments by Industry²³

As can be seen in Table 18, many of the businesses in the Dome Valley/Wellton Planning Area are basic support-type industries, such as banks, restaurants, gas stations, etc. This mix of businesses is consistent with what is expected in a community of this size. Table 17 also illustrates the dominate position of agriculture in the Dome Valley/Wellton Planning Area economy. Entries highlighted in green (Table 18) are all agriculture support industries. These statistics do not include primary agriculture operations such farms or livestock operations such as the McElhaney Cattle Company.

Number of establishments	62
Number of employees	397
Annual payroll	\$7,063,00

Table 19: Summary Statistics²³

Table 19 illustrates that most business establishments in the Dome Valley/Wellton Planning Area are small employing less than 10 people. Privately owned, non-farm enterprises employ 397 people in the Dome Valley/Wellton Planning Area and the Town of Wellton combined. This fact may explain why 212 (22%) of planning area residents commute to jobs outside the planning area.²⁴



Figure 56: Businesses in Tacna



Figure 57: Businesses in Tacna

²³ 2003 ZIP Code Business Patterns, U.S. Census Bureau

²⁴ Based on the fact according the 200 Census 212 people travel more than 30 minutes to their place of employment, and that no 2 points in the planning area are more than 30 minutes apart

Dome Valley/Wellton Planning Area Background Study
Agriculture

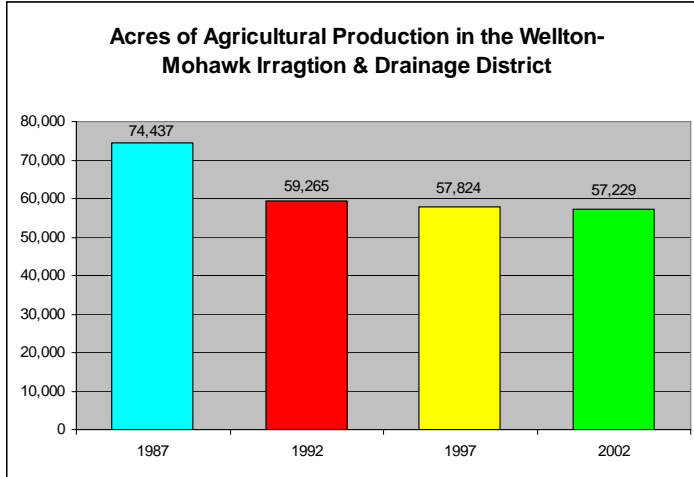


Figure 58: Acres of Agriculture Production²⁵



Figure 59: A Lettuce Crop in Dome Valley²⁶

Except for a significant drop between 1987 and 1992, the amount of agricultural production acreage in the WMIDD has remained very constant. The decline in acreage between 1987 and 1992 is largely a result of the Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of 1988. This act of Congress re-allocated 22,000 acre-feet of WMIDD’s water allocation for use in the Salt River Pima-Maricopa Indian Community water rights settlement. In order to accomplish this, the Bureau of Reclamation bought out willing land owners and removed the lands from irrigation. WMIDD is currently in the process of acquiring these lands under the Wellton-Mohawk Title Transfer Act.

Year	# of Acres	% of Total Ag. Acreage
1987	8,177	48.8%
1992	19,297	41.6%
1997	19,781	69.8%
2002	23,563	61.9%

Table 20: Lettuce Acreage²⁵

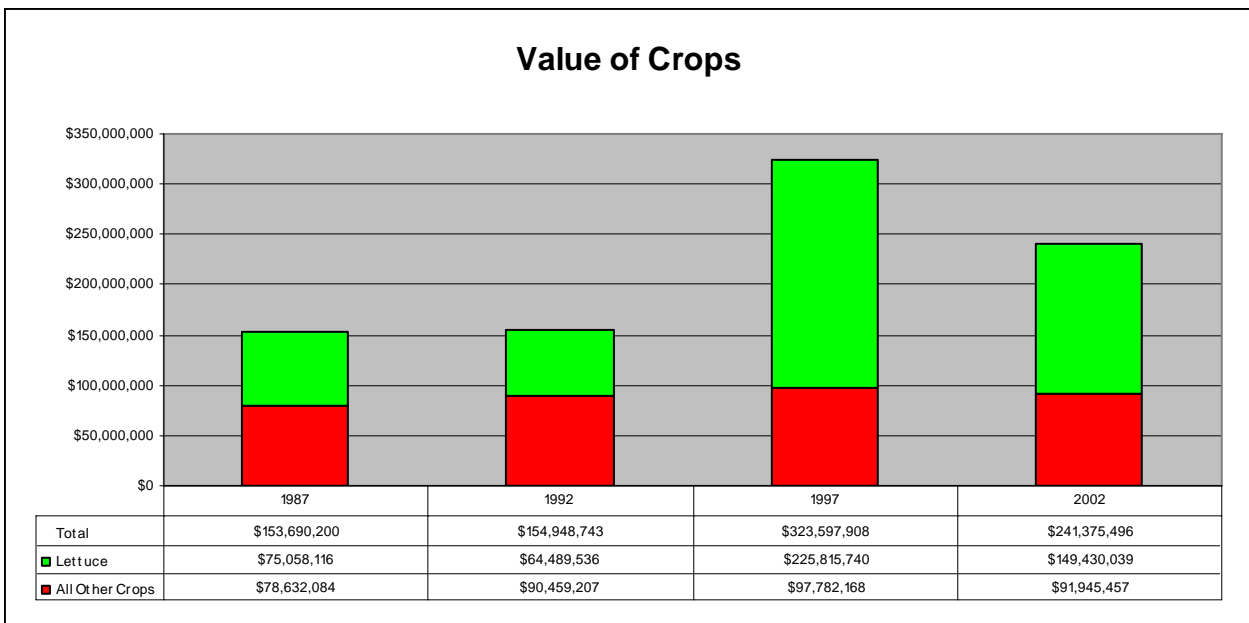


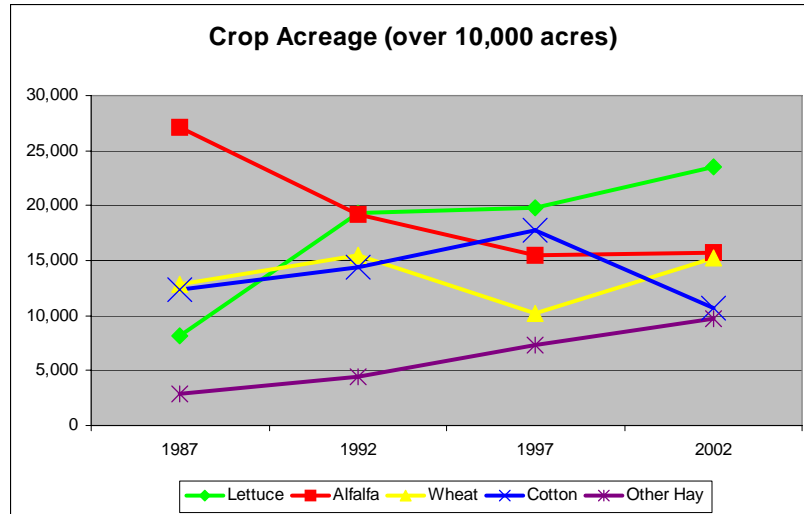
Figure 60: Value of Crops²⁷

²⁵ U.S.D.A. Census of Agriculture via WMIDD

²⁶ Wellton-Mohawk Irrigation and Drainage District

²⁷ Value of Crops were adjusted for inflation to 2006 dollars based on data from the Federal Reserve

Agriculture is the major economic activity in the Dome Valley/Wellton Planning Area. The value of all crops harvested in 2002 was close to one quarter of a billion dollars. In terms of acreage and value of the harvest, lettuce is the most significant crop in the Dome Valley/Wellton Planning Area. Lettuce farming started with a planting of eight acres in 1956.²⁹ By 2002, there was over 23,000 acres of lettuce planted, which accounted for 62% of the total acreage planted. The production of lettuce, occurring between November and March, has become the dominate economic activity of the Dome/Valley Wellton Planning Area. Between November and March, 30% of the lettuce consumed in the United States is grown in the Dome Valley/Wellton Planning Area.²⁸



Between 1987 and 2002 the number of acres planted with lettuce has steadily increased. During the same period of time, the acreage of alfalfa decreased by a nearly equivalent amount.

Figure 61: Crop Type by Acreage (Over 10,000 acres planted)³⁰

Most of the world's supply of registered Bermuda grass seed is grown in the Dome Valley/Planning Area.²⁹ Since dropping significantly between 1987 and 1992, the amount of grass seed grown has held relatively constant. Greens, such as, Kale have quickly become an important crop the area. The amount of greens planted expanded in acreage from 0 in 1992 to more 2,500 acres in 2002.

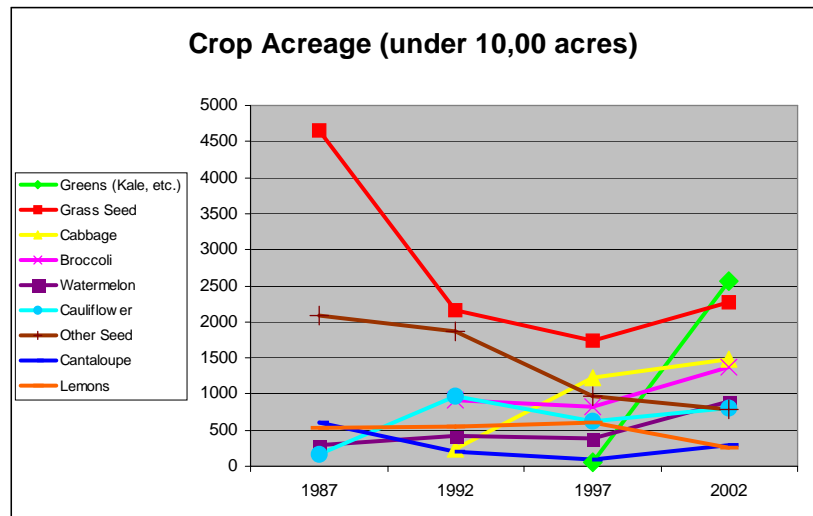


Figure 62: Crop Type by Acreage (under 10,000 acres planted)³⁰

²⁸ U.S.D.A. Census of Agriculture

²⁹ Wellton-Mohawk Irrigation and Drainage District

³⁰ U.S.D.A. Census of Agriculture via WMIDD

Dome Valley/Wellton Planning Area Background Study
 Proposed Oil Refinery

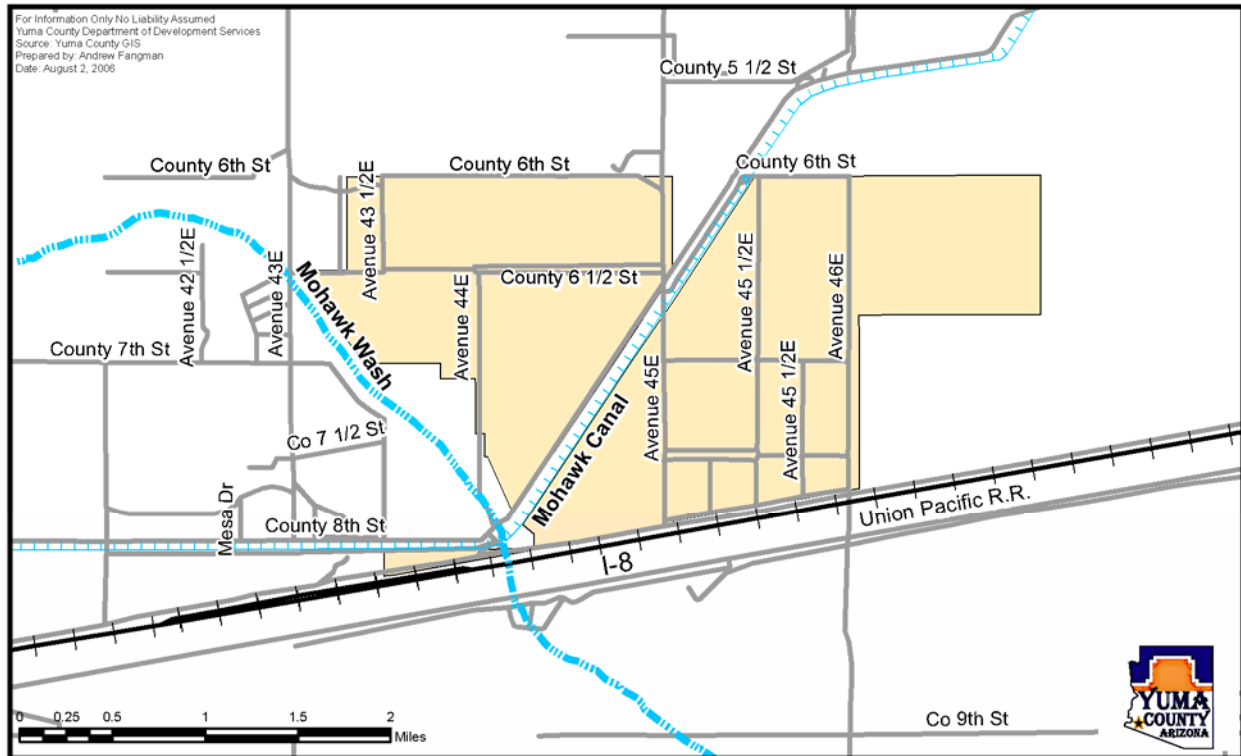


Figure 63: Location of Proposed Oil Refinery

In 2003, Arizona Clean Fuels Yuma proposed to build a 150,000 barrel per day oil refinery on a site five miles east of Tacna (see Figure 61). Major Amendment 2004-PA-04, approved in December of 2004, redesignated 3,313 acres of Bureau of Reclamation land, shown in Figure 61 as beige, as Heavy Industrial. The exact location of the 1,450 acre oil refinery has not yet been determined. On April 14, 2005, the Arizona Department of Environmental Quality issued an Air Quality Permit for the refinery. This permit is currently in the process of being renewed for an additional 18 months. In November of 2005, an agreement was reached with Mexico to allow to construction of a pipeline taking crude oil from a proposed new port in Mexico to the U.S.-Mexico border. In order for the refinery project to proceed, the land transfer between the BoR and WMIDD was being finalized. Arizona Clean Fuels has an agreement to purchase the refinery site from WMIDD. The oil pipeline route must be determined and an environmental impact statement completed for the pipeline that will bring crude oil from the border to the refinery site. This will not happen until the agreement to supply crude oil is signed. The site is currently zoned RA-40 and will need to be rezoned to Intensive Industrial.

Company	City	State	Capacity (BpD) ³¹	Employees ³²
Valero	Paulsboro	NJ	160,000	540
Valero	Sunray	TX	158,327	430
Citgo	Corpus Christi	TX	156,000	525
Shell	Martinez	CA	155,600	700
Arizona Clean Fuels Yuma	Tacna	AZ	150,000	?
ExxonMobil	Torrance	CA	149,500	800
Valero	Lima	OH	146,900	400
ConocoPhillips	Borger	TX	146,000	765
Sunoco	Westville	NJ	145,009	479
Shell	Anacortes	WA	145,000	410
			Average	561

Table 21: Refinery Employment

The proposed refinery is currently projected to cost \$2.6 billion to construct. As of August of 2006, the refinery is targeted to be operational some time in 2011. Table 22 lists the number of employees at the 9 existing oil refineries closest in size to the one proposed. They average 561 employees; ACFY projects about 600 employees.

³¹ Energy Information Administration, Refinery Capacity 2006

³² Websites of companies listed

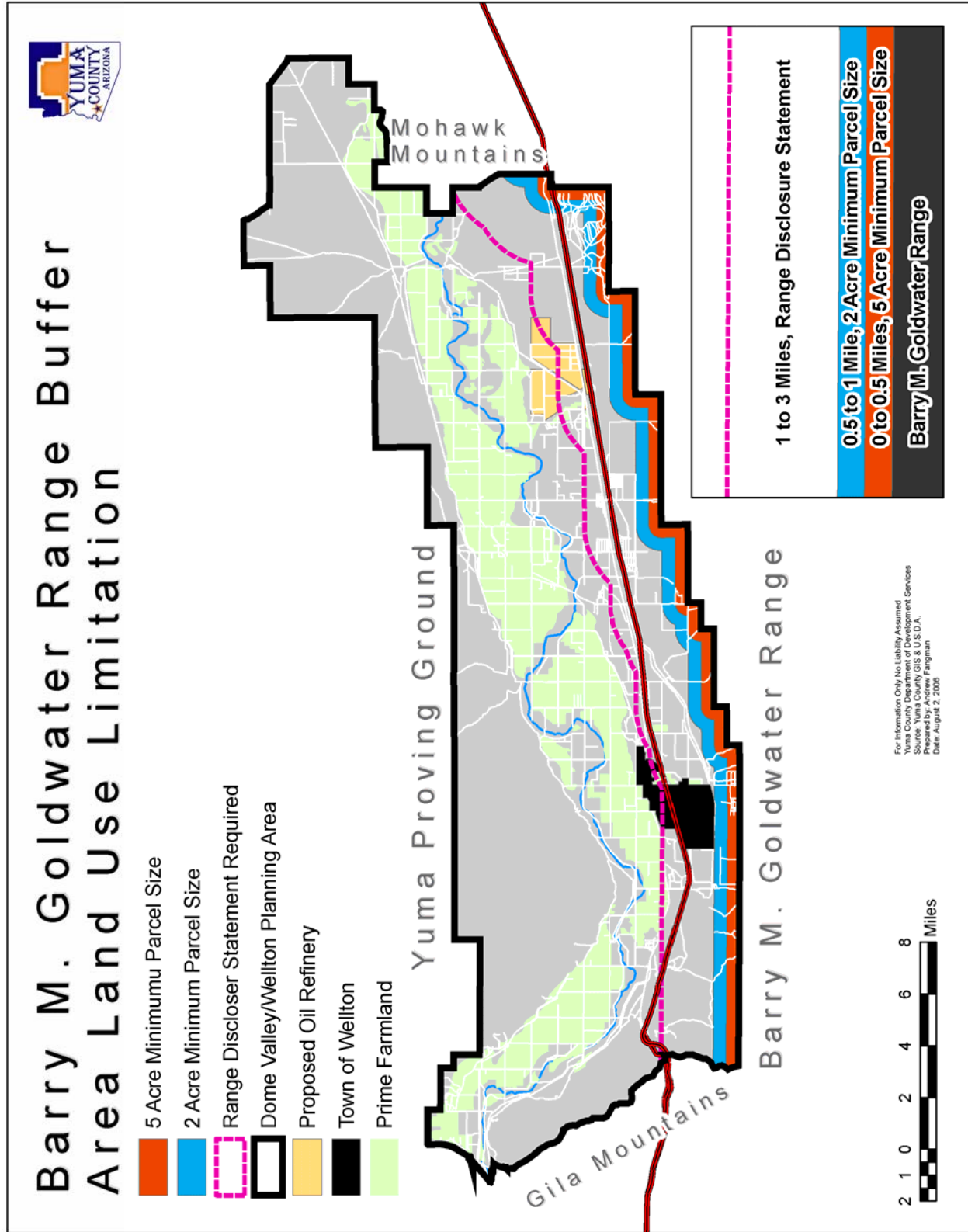


Figure 64: B.M.G.R. Range Buffer Area Land Use Limitation

Dome Valley/Wellton Planning Area Background Study

J.L.U.S. Buffer

At the October 3, 2005 meeting, the Board of Supervisors adopted Minor Amendment 2005-MA-27, which added the following text to the Yuma County 2010 Comprehensive Plan:

Chapter 4.12: Land Use Element

Barry M. Goldwater Range Buffer Area Land Use Limitation

The Gila Bend Air Force Auxiliary Field/Barry M. Goldwater Range joint land use study was completed February 2005 as part of a statewide compatibility project. The study was prepared to provide tools to address land use conflicts that might affect the ability of the base to conduct its mission, and to ensure land use compatibility around active military reservations, as required under Title 23, Article 7 of the Arizona Revised Statutes (ARS). In order to implement the findings of this study the following density and intensity guidelines are established:

- *The applied use of land within ½ mile of the boundary of the Barry M. Goldwater Range boundary that is east of the Gila Mountains or south of Co. 17th will have residential density no greater than 5 acres per lot/parcel.*
- *The applied use of land from within ½ mile to 1 mile from the Barry M. Goldwater Range boundary that is east of the Gila Mountains or south of Co. 17th will have residential density no greater than 2 acres per lot/parcel.*
- *The applied use of property for residential purposes for lands up to 3 miles from the Barry M. Goldwater range boundary that is east of the Gila Mountains or south Co. 17th will be required to file a range and military ground support disclosure statement.*
- *Amendments to land use classifications up to 3 miles from the Barry M. Goldwater range boundary will take into consideration the impacts of increasing density in regard to potential conflicts with the Barry M. Goldwater Range.*
- *Property access to roadways bordering the BMGR boundary (particularly County 14th Street in Yuma County) will be limited to reduce the opportunities for unauthorized access to the range. Use of access roads to the BMGR will be restricted in order to discourage access to the BMGR by unauthorized personnel.*

In order to more effectively implement the Barry M. Goldwater Range Buffer Area Land Use Limitation, the Board of Supervisors adopted Minor Amendment 2006-MA-06 which creates a new Agricultural Rural Development (A-RD) classification in the Comprehensive Plan. The minimum lot size in the new A-RD land use category is 5 acres. It allows for all agricultural/rural zoning districts (RA-40, RA-20, RA-10, and RA-5). This is the most dense land use classification allowed for properties within ½ mile of the BMGR.

In order to more effectively implement the Barry M. Goldwater Range Buffer Area Land Use Limitation, this density range does not affect any of the pre-existing zoning of any properties within the BMGR Buffer Area. All properties within said area will be allowed to develop at the maximum density that the existing zoning district will allow, provided that the zoning is in full force and effect.

With the addition of the BMGR Buffer Area Land Use Limitation to the Comprehensive Plan, residential development at a density greater than one house per two acres, is confined to a wide swath of land, with I-8 in the middle, one mile north of the BMGR and on the mesa south of the prime farmland. Currently, the majority of residential development in the planning area is taking place within this swath.

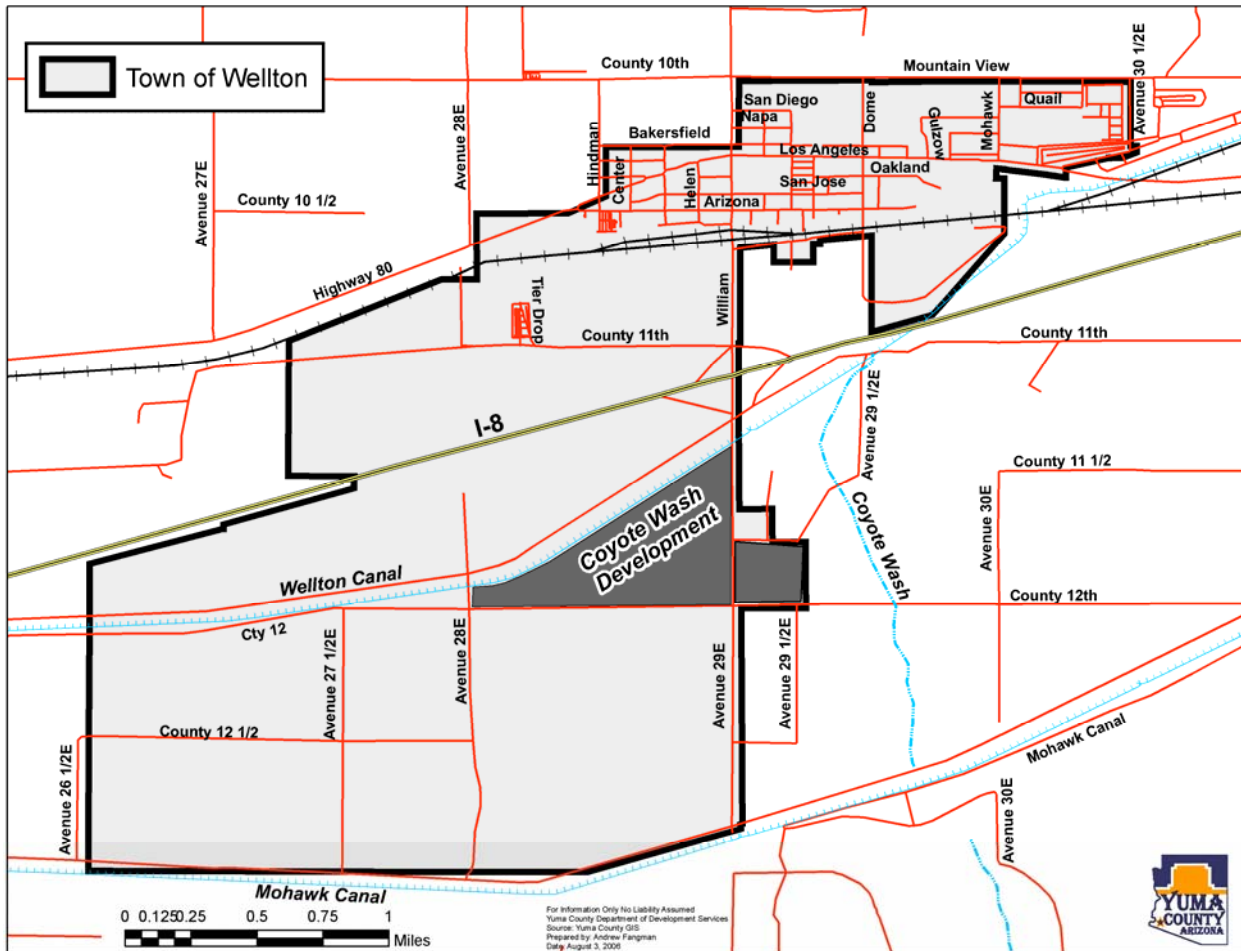


Figure 65: Town of Wellton

The Town of Wellton does not fall under the planning jurisdiction of Yuma County, and as such, is not included in the Dome Valley/Wellton Planning area development goals, objectives or policies. However, because the Town of Wellton is located in the middle of the Dome Valley/Wellton Planning Area and serves as its primary urban services center, development within the Town of Wellton can have a tremendous effect on the planning area. A major development, Coyote Wash, in the Town of Wellton is presently under construction at the intersection of County 12th Street and Avenue 29E. When fully built out, Coyote Wash will include 2,500 residential lots, 140 condominiums, 36 holes of golf, a three-story, 92-room hotel, two shopping centers, a park, restaurants, a gas station, grocery stores, a driving range, a new recreational vehicle park, a church, a fast food restaurant and a new bank.³³ Developments of this scale are unprecedented in this part of Yuma County, and will have a major impact on the Dome Valley/Wellton Planning Area. The major increase in shopping opportunities is likely to make the entire area more desirable for residential development. It is also likely that there will be a greater interest in residential development on lands in unincorporated Yuma County lands near the Coyote Wash development.

³³ Schimdt, Blake "Wellton To Double Population in Next 3 Years." *Yuma Sun*, August 20, 2005

*Dome Valley/Wellton Planning Area Background Study
City of Yuma Annexation*

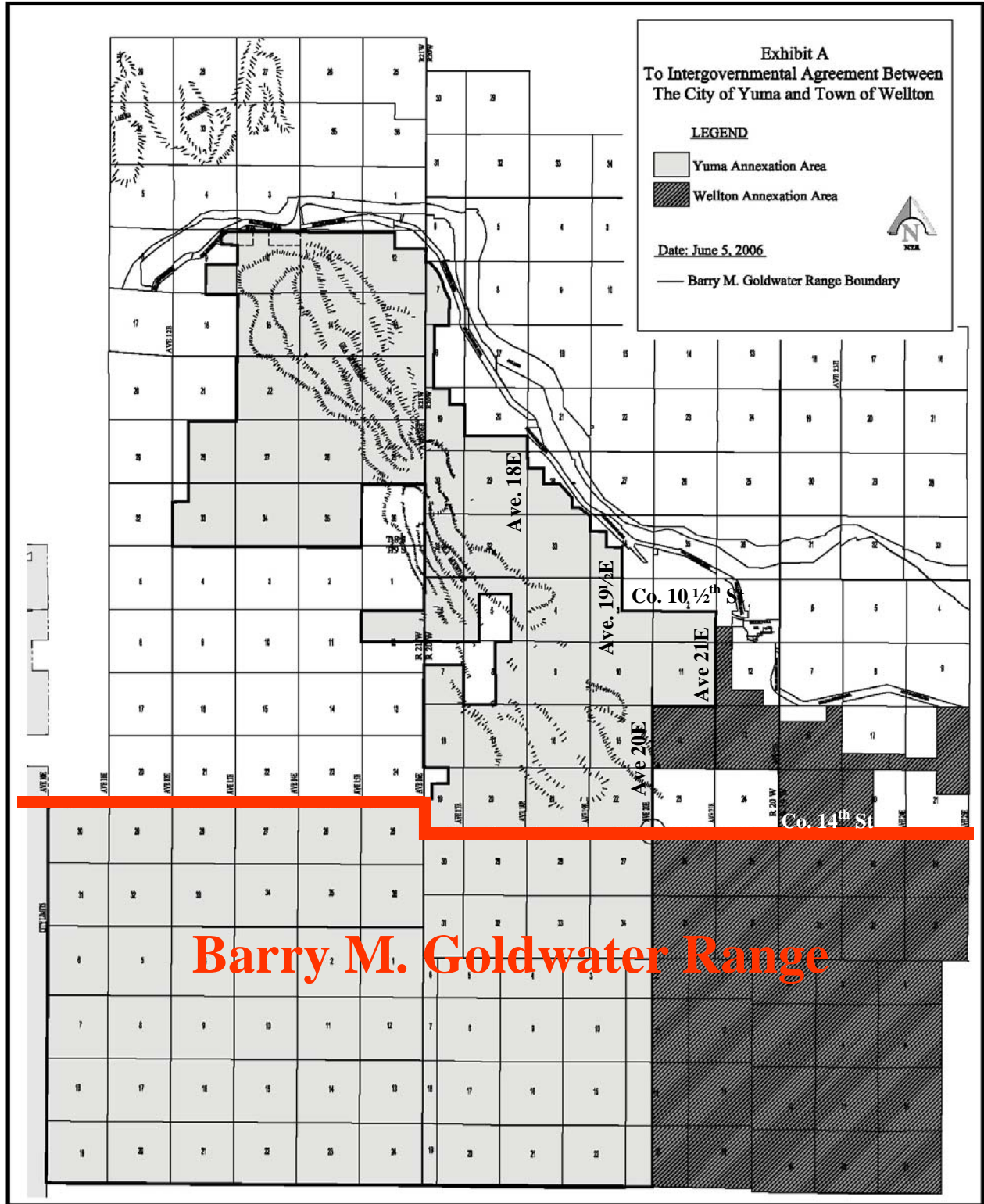


Figure 66: Proposed City of Yuma Annexation, and Intergovernmental Agreement with the Town of Wellton³⁴

³⁴ City of Yuma

Dome Valley/Wellton Planning Area Background Study
City of Yuma Annexation

On August 23, 2006 the City of Yuma will began the process of annexing 93 square miles of land of land in and around the Gila Mountains (see Figure 65). If completed, this annexation would bring the Yuma city limits into the Dome Valley/Wellton Planning area for the first time. On June 5, 2006 the City of Yuma and the Town of Wellton signed an intergovernmental agreement that delineates the area in which each municipality is free to annex (see Figure 65). The Town of Wellton has not yet begun to annex up to the limit set in the intergovernmental agreement with the City of Yuma.

The majority of the land being annexed by the City of Yuma is inside the Barry M. Goldwater Range. The remainder of the land being annexed is controlled by the Bureau of Land Management. The proposed annexation does not include any of the Bureau of Reclamation land that is covered by the Wellton-Mohawk Title Transfer Act, nor does it include any private land.

The City of Yuma will not have the authority to regulate land use on any of the land be annexed. This is because all the annexed land is federal land. Cities and counties do not have the authority to regulate land use on federally-owned land. The City of Yuma would gain authority to regulate land use on this land if it were ever transferred to private ownership. Currently there are no plans for the Bureau of Land Management to sell this land.

The portion of the annexation area that extends into the Dome Valley/Wellton Planning Area is currently covered by an Open Space Overlay District in the 2010 Yuma County Comprehensive Plan. The overlay zone was implemented with the intent to preserve the Gila Mountains and Antelope Hills from residential encroachment. Yuma County developed overlay districts based on environmental or other special development constraints to protect and provide for open space and recreational resources monitored and actively pursued for designation as open space conservation, recreational resources, parks, trails and/or open space overlays. It is anticipated that the City of Yuma will continue with a similar policy.³⁵