



CITY OF ONTARIO

WATER SUPPLY ASSESSMENT REPORT

For the Guasti Plaza Specific Plan Amendment

Submitted to:

CITY OF ONTARIO
Ontario, California

August 2009



CITY OF ONTARIO

WATER SUPPLY ASSESSMENT REPORT FOR THE GUAISTI PLAZA SPECIFIC PLAN AMENDMENT

Submitted to

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- A-2 City of Ontario Resolution 2005-126-Adopting the City of Ontario 2005 Urban Water Management Plan, dated December 20, 2005
- A-3 City of Ontario Resolution 2008-103-Adopting Addendum No. 1 to the City of Ontario Urban Water Management Plan, dated October 7, 2008
- B-1 Chino Basin Adjudication Judgment and Related Legal Documents
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1.0 INTRODUCTION

1.1 Background

The City of Ontario adopted the Guasti Plaza Specific Plan (GPSP) in 1996, to regulate development within the historic Guasti community, located at the northern section of the City south of the San Bernardino (1-10) Freeway and north of the Ontario International Airport. The Guasti Plaza Specific Plan proposes a maximum of 3.2 million square feet of hotel, office, retail, restaurant and related land uses, along with the retention of the historic structures for adaptive reuse.

1.2 Purpose

A project is proposed to allow development of 500 multiple family and mixed-use residential units within the specific plan area. Since residential uses were not included in the Guasti Plaza Specific Plan, a specific plan amendment is required to change the land use concept in the original specific plan to allow for multiple family residential and mixed-use (multiple family residential in conjunction with currently-allowed commercial and office uses) within the specific plan area. The City of Ontario is the Lead Agency and will prepare a Supplemental Environmental Impact Report (SEIR) for the Guasti Plaza Specific Plan Amendment (PSPA 08-006).

1.2 Scope of Work

A water supply assessment report will be prepared for the Guasti Plaza Specific Plan Amendment to verify that sufficient water supply is available based on substantial evidence. The Water Supply Assessment will be prepared in accordance with the Guidebook for Implementation of Senate Bill 610 and 221 (2001). The water supply assessment will be based on information from the 2005 Urban Water Management Plan and updated to be consistent with information contained in The Ontario Plan and the new City Water Master Plan Update. Specific tasks to be completed are as follows:

Task 1

Document the historical demand, as well as the normal year future demand for the service area during the same five year increments as the supply (20-year projection period). The 2005 Ontario Urban Water Management, and updates developed by the City staff will be used as the basis for the water supply data.

Task 2

Document the single dry year and multiple dry year supplies, and demands during the planning horizon, with comparisons to the projected demands. The single and multiple dry year supplies will be determined for each five year period during the planning horizon (20-year projection period).

Task 3

Quantify and compare the supplies and demands needed for the land use proposed by the developer. Sources of supply to make up any deficiency will be identified if the proposed demand out paces existing demand during any five year period.

Task 4

Submit a draft copy of the document, address any comments, and prepare the final document. Provide assistance to the City during the EIR review period, and make the necessary revisions for final approval.

1.4 Abbreviations

To conserve space and improve readability, abbreviations have been used in this report. Each abbreviation has been spelled out in the text the first time it is used. Subsequent usage of the term is usually identified by its abbreviation. The list of abbreviations utilized in this report is contained in **Table 1.1**.

Table 1.1
Abbreviations

Abbreviations	Explanation
AC, ac	Acres
AF, af	Acre-feet
AFY, ac-ft	Acre-feet per Year
amsl	Above Mean Sea Level
CDA	Chino Desalter Authority
cfs	Cubic Feet per Second
CIP	Capital Improvement Program
City	City of Ontario
CB, CBWM	Chino Basin, Chino Basin Watermaster
DU, du	Dwelling Unit
DY, DYY	Dry Year, Dry Year Yield
EDU	Equivalent Dwelling Unit
EIR	Environmental Impact Report
FAR	Floor Area Ratio
GIS	Geographic Information System
gpcd	Gallons per Capita per Day
GPD, gpd	Gallons per Day
gpm	Gallons per Minute
GP	General Plan
GPSP	Guasti Plaza Specific Plan
ID	Identification
IEUA	Inland Empire Utilities Agency
JCSD	Jurupa Community Service District
MG, mg	Million Gallons
MGD, mgd	Million Gallons per Day
MWD	Metropolitan Water District of Southern California
NMC	New Model Colony
O&M	Operations and Maintenance
OSY	Operating Safe Yield
PS	Pump Station
SB	Senate Bill
SWRCB	State Water Resources Control Board
SEIR	Supplemental Environmental Impact Report
TOP	The Ontario Plan
TSF	Thousand Square Feet
UWMP	Urban Water Management Plan
WFA	Water Facilities Authority
WMP	Water Master Plan

2.0 WATER SUPPLY ASSESSMENTS LEGISLATION

Preparation of SB 610 Water Supply Assessments and SB 221 Written Verifications of Water Supply are linked and interdependent with an agency's General Plan and Urban Water Management Plan (UWMP). A complete UWMP is considered to be a foundational document and source of information for SB 610 Water Supply Assessments and SB 221 Written Verifications of Water Supply. UWMPs serve as a critical source document for cities/counties as they update General Plans. General Plans are a source document as water suppliers update UWMPs. Senate Bills 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) were adopted in 2001 and amended state law, effective January 1, 2002

2.1 SB 610 Water Supply Assessment And SB 221 Written Verification Of Water Supply

Population growth in the State of California has resulted in additional water demand on water systems. The State legislature has enacted SB 610 and SB 221 to ensure the increased demands are adequately addressed, and a firm source of water supply is available prior to approval of certain developments. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water supplier and cities and counties. These two measures amended State law, California Water Code Section 10910-10912 to require detailed information regarding water availability to be provided to city and county land use planners prior to approval of certain specified large land development projects.

SB 610 requires an urban water supplier to include a description of all water supply projects and programs that may be undertaken to meet total projected water use over the next 20 years. SB 221 prohibits approval of a tentative map, or a parcel map for which a tentative map was not required, or a development agreement for a subdivision of property of more than 500 dwelling units, including the design of the subdivision or the type of improvement, unless the legislative body of a city or county or the designated advisory agency provides written verification from the applicable public water system that a sufficient water supply is available, or in addition, a specified finding is made by the local agency that sufficient water supplies are, or will be available prior to the completion of project. Sufficient water supply is the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand. This assessment follows the guidelines in California Water Code sections 10910-10912 for the approach, required information, and criteria for determining supply sufficient for a water supply assessment.

2.2 Urban Water Management Plan

The California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610 – 10656) in 1983. The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act describes the contents of the Urban Water Management Plans as well as how urban water suppliers should adopt and implement the plans.

It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied. A copy of the 2005 Ontario Urban Water Management Plan and supporting documents are include in Appendix A as follows:

- **Appendix A-1:** City of Ontario 2005 Urban Water Management Plan, December 2005, prepared by MWH
- **Appendix A-2:** City of Ontario Resolution 2005-126-Adopting the City of Ontario 2005 Urban Water Management Plan, dated December 20, 2005
- **Appendix A-3:** City of Ontario Resolution 2008-103-Adopting Addendum No. 1 to the City of Ontario Urban Water Management Plan, dated October 7, 2008

2.3 General Plan

State law requires that local jurisdictions update their General Plans every 10 years and their Housing Elements generally every five years. Ontario's last comprehensive General Plan update was in 1992. The Housing Element was updated in 2001. The City is preparing a new General Plan Update, known as The Ontario Plan. A Program EIR for The Ontario Plan has been completed and is currently available for public review. The Ontario Plan revised land use plan and demographics has been reviewed and incorporate into this Water Supply Assessment Report for the Guasti Plaza Specific Plan Amendment.

3.0 REFERENCE REPORTS

The following reference reports provide key information used to prepare this water supply assessment report:

- 1992 Ontario General Plan
- 2005 Ontario Urban Water Management Plan
- 2006 Ontario Water and Recycled Water Master Update Plan
- The Ontario Plan – (2009 General Plan Update)
- 2009 Ontario Water and Recycled Water Master Update Plan (report in progress/not finalized)

3.1 1992 Ontario General Plan

The current City of Ontario General Plan was adopted in 1992. In 1998, the City prepared a General Plan Amendment which established a Sphere of Influence General Plan for an 8,200-acre “agricultural preserve,” located south of the existing City boundary. In November 1999, the City annexed 8,200-acre area, known as the New Model Colony, into the City. The combined land use plans from the 1992 Ontario General Plan and 1998 New Model Colony General Plan Amendment was used as the basis for preparation of the 2005 Ontario UWMP and 2006 Water and Recycled Master Plan Update.

3.2 2005 Ontario Urban Water Management Plan

The 2005 Ontario UWMP was adopted by the Ontario City Council and submitted to the State of California Department of Water Resources (DWR) in December 2005. The City received comments on the 2005 UWMP from DWR in 2008. The City staff prepared Addendum No. 1 to add supplemental information to the 2005 UWMP based on DWR comments. Addendum No. 1 to the 2005 UWMP was adopted by the Ontario City Council and submitted to DWR in October 2008.

3.3 2006 Ontario Water And Recycled Water Master Plan Update

The City of Ontario 2006 Water and Recycled Water Master Plan Update was prepared to evaluate the existing City water system and prepare an updated capital improvement program (CIP). The City of Ontario 2005 Urban Water Management Plan and 2006 Water and Recycled Water Master Plan Update were prepared concurrently using the 1992 General Plan and 1998 New Model Colony General Plan Amendment as the basis for land use and water demand projections.

3.4 The Ontario Plan- General Plan Draft Report

The City authorized work to begin on a General Plan Update in November 2005. The General Plan Update is known as The Ontario Plan (TOP). Most TOP documents are still DRAFT and have not been adopted by the Ontario City Council. The following documents have been adopted to date:

- Vision 2030 was adopted in February 2007
- Council Priorities were adopted in February 2009.

The City Council also reviewed The Ontario Plan web-site at two work sessions in February 2009 and they directed staff to make it available to the public. The web-site was activated for public viewing on March 02, 2009.

3.5 2009 Water And Recycled Water Master Plan Update

The City of Ontario awarded a contract to AKM Consulting Engineers to prepare a Water and Recycled Water Master Plan Update. City demographics, water supply and water demand data are being reviewed and updated to correspond to the revised TOP demographics. The TOP land use plan and corresponding updated water demand factors are incorporated into this Water Supply Assessment Report.

4.0 PROJECT LOCATION AND STUDY AREA DESCRIPTION

4.1 Regional Setting

Figure 4.1 is a regional location map for the City of Ontario. The City of Ontario is located approximately 35 miles east of downtown Los Angeles and encompasses approximately 50 square miles (32,000 acres) of residential, commercial, and industrial lands. It is bordered by the Cities of Chino and Montclair on the west; the Cities of Upland and Rancho Cucamonga on the north; the City of Fontana and Riverside County on the east; and New Model Colony, Riverside County, and the City of Chino on the south. The major highways crossing through portions of the study area include the San Bernardino Freeway (I-10) on the north, the Pomona Freeway (SR-60) on the south, and the Ontario Freeway (I-15) on the east. Major roads within the City include Euclid Avenue, Mission Boulevard, and Philadelphia Street.

4.2 Project Location

The Guasti Plaza site is located within the City of Ontario's Old Model Colony. The Specific Plan area encompasses approximately 73.1 acres bounded by the Interstate 10 Freeway to the north, Turner Avenue on the east, the Union Pacific Railroad right-of-way on the south and Archibald Avenue to the west. The proposed Amendment would affect approximately 13 acres along Turner Avenue, New Guasti Road, Biane Lane, and the Union Pacific Railroad tracks, as well as an approximate 9-acre area at the western section of the site, along Archibald Avenue. The Specific Plan area does not include land uses listed in government databases as hazardous material users and/or hazardous waste generators. **Figure 4.2** shows the location of Guasti Plaza.

4.3 City History and Background

The City of Ontario was incorporated on December 10, 1891 with a population of about 683. It was initially developed as an agricultural community largely devoted to citrus fruits. The production of peaches, walnuts, lemons, and grapes also played an important role in the growth of Ontario. Latimer Field was established by airplane enthusiasts in 1923. From then on, the area became increasingly aviation conscious. Urban growth pushed the aviators further east to the present location of Ontario International Airport, which was used as a training center for pilots during World War II.

Since World War II, Ontario has become a much more diversified community. The population steadily grew by approximately 20,000 every ten years from 1950 to 1980. From 1980 to 1990, the population jumped from 88,820 to 133,179. Ontario has been one of Southern California's fastest growing cities for more than 25 years and is one of California's first planned communities.

Today, Ontario is a full service city with a population exceeding 173,000. It consists of approximately 50 square miles of residential, commercial, and industrial areas. The economy now reflects a large industrial and manufacturing base. Residents enjoy the mild Southern California climate as well as the many available amenities in and around the Los Angeles area. Anticipated growth is expected to add over 185,000 people as substantial residential development begins in the 8,200 acre New Model Colony (*Ref: City Economic Development website*).

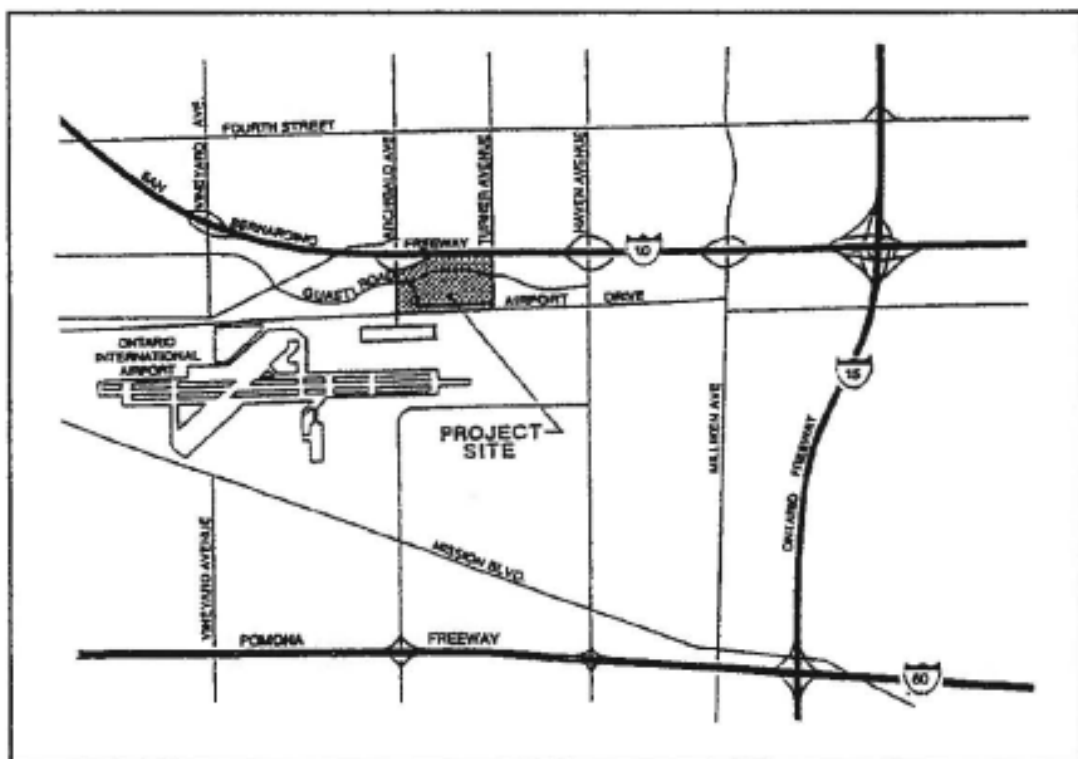
FIGURE 4.1

CITY OF ONTARIO-REGIONAL LOCATION MAP



FIGURE 4.2

CITY OF ONTARIO-GUASTI PLAZA PROJECT SITE MAP



4.4 Topographical Description and Geology

General Area

The San Bernardino Plain is an expanse of sand, gravel and boulders. Dominating the valley are Mt. San Antonio, Cucamonga Peak, and Ontario Peak. Cucamonga Peak is visibly flat on top which represents sections of the original valley floor. Loose dirt and gravel flows swiftly from the slopes of these young mountains with the sometimes torrential rains.

The valley and plain has taken more than 10 million years to form. Geologists place the beginning of the area's geologic history between 12 and 28 million years ago, the same time the San Andreas Fault is believed to have been formed. The San Gabriel Mountains are part of the east-west trending transverse ranges, which run across the north-south grain of California. The San Gabriel Mountains are intersected 25 miles east of Ontario at the Cajon Pass by the San Andreas Fault. These mountains were partially formed by geologic activity along this fault. Visible to the south of Ontario is a portion of the peninsular range consisting of the Santa Ana Mountains, the base of which is carved by the Santa Ana River. Several blocks of the Peninsular Range are separated by faults generally attributed to the San Andreas Fault system. Small rolling hills make up the north and west portions of the valley (Chino Hills, Diamond Bar, and the Covina Hills).

The Transverse and Peninsular Ranges meet in the San Geronio Pass area, 50 miles east of Ontario. Mount San Geronio is the tallest peak in Southern California and is frequently visible from Ontario.

Old Model Colony

Local elevations within the study area range from 1170 feet amsl at the north City boundary near Grove Avenue to 730 feet amsl at the intersection of Archibald Avenue and Schaefer Avenue. The terrain slopes generally from north to south and east to west.

There are six major drainage channels located within the City boundaries: West Cucamonga Creek, Cucamonga Creek, Upper Deer Creek, Lower Deer Creek, Day Creek, and Lower Etiwanda Creek.

The following native soils classifications can be found in Ontario:

Class I Soils

- Hanford Sandy Loam

Class II Soils

- Hanford Coarse Sandy Loam
- Hilmar Loamy Fine Sand

Class III Soils

- Delhi Fine Sand
- Tujunga Loamy Sand

Class IV Soils

- Soboda Stony Loamy Sand
- Tujunga Gravelly Loamy Sand

Figure 4.3 shows the locations of the major drainage channels and maps the soils classifications within the City.

4.5 Climate

The climate in the study area is Mediterranean-like with generally moderate temperatures and low humidity year-round. The average median temperature is approximately 83° F. The average annual days of sunshine is 312.

The historical average annual rainfall is about 16 inches. Most of the rainfall typically occurs between October and April. **Figure 4.4** shows the seasonal rainfall from 1994 to 2007 as measured by the San Bernardino County Rain Gauge Stations 2835 and 1335. Station 2835 is located at a local fire station on Mountain Avenue, south of Fourth Street. Station 1335 is located on the southeast corner of Francis Street and Parco Avenue. The total rainfall for 2006-2007, the period of this study, was well below the historical average.

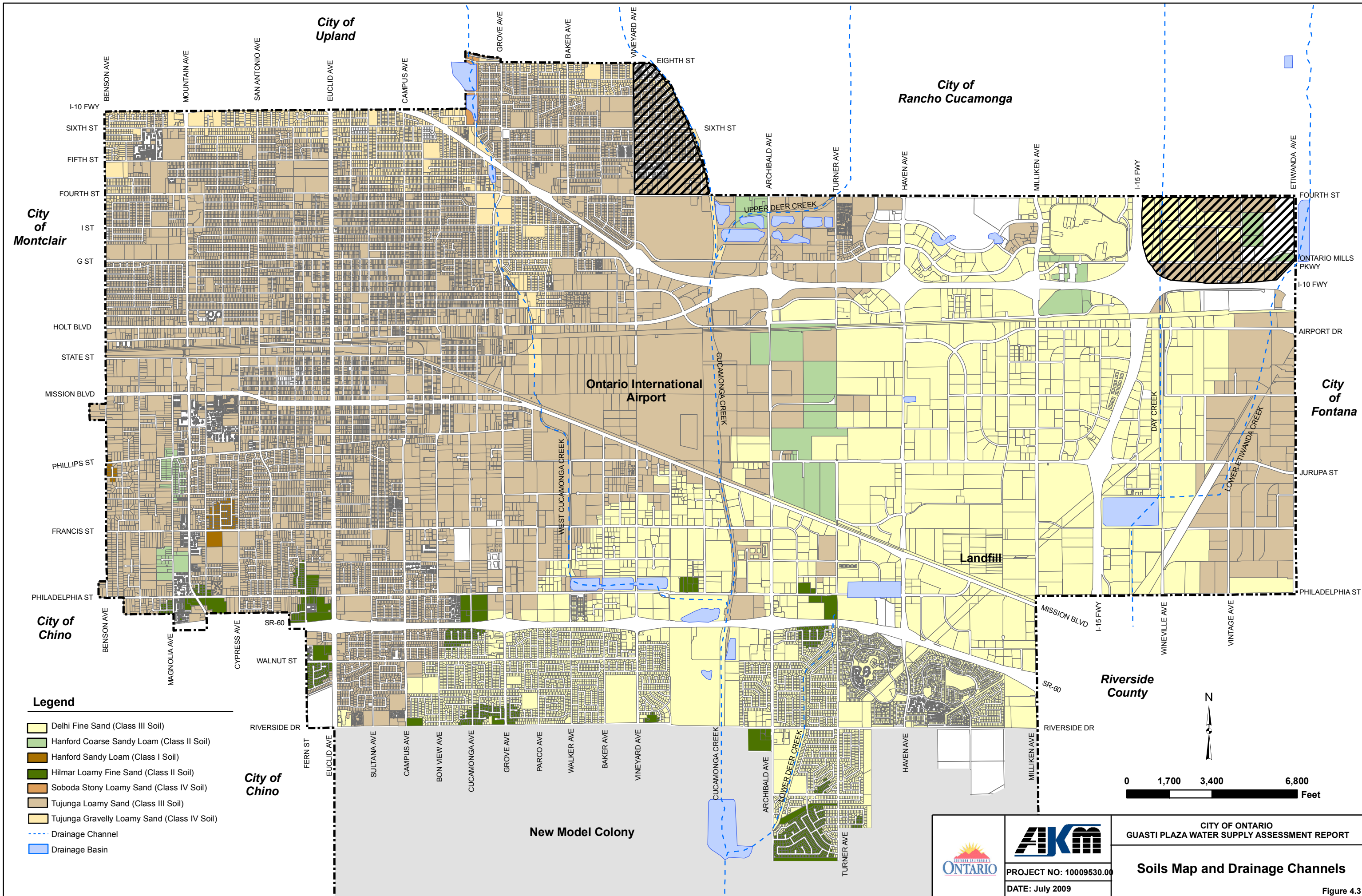
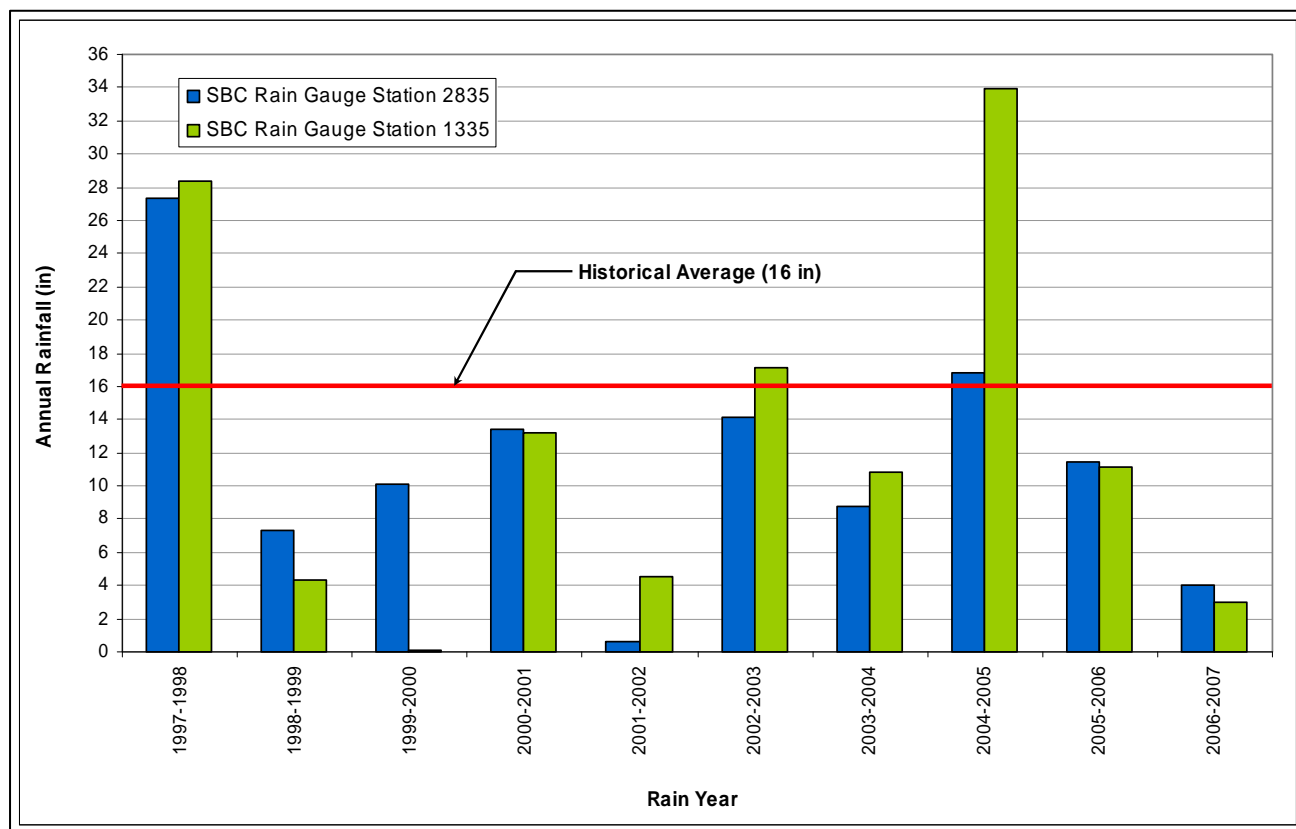


Figure 4.4
Seasonal Rainfall 1997-2007



5.0 LAND USE

5.1 Existing Land Use

The City's GIS parcel land use data was used to identify new development to update land use information contained in the 1992 General Plan land use map. Aerial photographs, field review records, and other data were reviewed to supplement the GIS data and land use map. The City is a well-planned urban community with a balance of residential, commercial, and industrial land uses. The total area of the City is 31,966 acres or approximately 50 square miles. The total area of the Old Model Colony is approximately 23,700 acres or 37 square miles. The total area of the New Model Colony is approximately 8,200 acres or 13 square miles. The City's existing residential land use categories total 5,995 acres or 18.8% of the total City acreage. Non-residential land uses include various types of commercial and industrial land uses. Non-residential land use totals 6,707 acres or 20.0% of the total City acreage. Other Categories includes parks, schools, street right-of way, utility property and easements, agricultural and vacant land. The New Model Colony totals approximately 8,200 acres in area. To date, most of the New Model Colony remains undeveloped and the acreage is tabulated in the agricultural and vacant land categories. **Table 5.1** provides a summary of the existing Old Model Colony land uses. **Figure 5.1** shows the locations of these land uses.

5.2 Ultimate Land Use Projections under the 1992 General Plan

Table 5.2 contains the ultimate land statistics as presented in the 1992 General Plan and supplemented by the NMC Specific Plan Amendment. **Figure 5.2** is an ultimate land use map based on the 1992 General Plan and 1998 NMC General Plan Amendment.

5.3 Ultimate Land Use Projections under The Ontario Plan

Table 5.3 contains the ultimate land statistics as presented in The Ontario Plan. **Figure 5.3** is an ultimate land use map from The Ontario Plan.

5.4 Comparison of the 1992 General Plan and The Ontario Plan

The table compares the total of residential and non-residential land uses under the 1992 General Plan and The Ontario Plan.

Source	Residential	Non-Residential
1992 General Plan	78,592 units	243,347,977 square feet
The Ontario Plan	104,645 units	257,405,756 square feet

5.5 Guasti Plaza Specific Plan Amendment Land Use

The proposed project would allow development of 500 multiple family and mixed-use residential units within the specific plan area. The specific plan amendment changes the land use concept in the original specific plan to allow for multi-family residential and mixed-use within the specific plan area. The proposed high density residential development replaces the office on a one-to-one basis and results in no net increase in building square footage over the approved specific plan.

Table 5.1
Existing Land Use

Land Use Designation	Acres	Residential Units	Non-residential Square Footage
Residential Categories			
High Density Residential	445	9,508	
Low Density Residential	4,989	30,229	
Low-Medium Density Residential	113	1,104	
Medium Density Residential	241	3,347	
Mobile Home	202	2,091	
Other Residential	5	1	
Subtotal	5,995	46,280	
Non-Residential Categories			
Administrative/Professional	151		3,275,261
Commercial	1,134		12,968,195
Industrial	1,353		15,480,433
Manufacturing	1,723		15,446,253
Office	376		8,354,829
Public Facilities	165		3,162,488
Warehousing	1,805		19,902,552
Subtotal	6,707		78,590,011
Other Categories			
Agricultural Multi-Use	6,808		
Land Use Designation	Acres	Residential Units	Non-residential Square Footage
Miscellaneous Service Organizations	87		
Parks/Recreation/Cultural	754		
Schools	497		
ROW	5,137		
Transportation/Utilities/Communication	3,247		
Vacant	2,512		
Vacant Building	222		
Subtotal	19,264		
Totals	31,966	46,280	78,590,011

Source: The Ontario Plan Draft Environmental Impact Report 2009 Table 4-1

Figure 5.1
Existing Land Plan

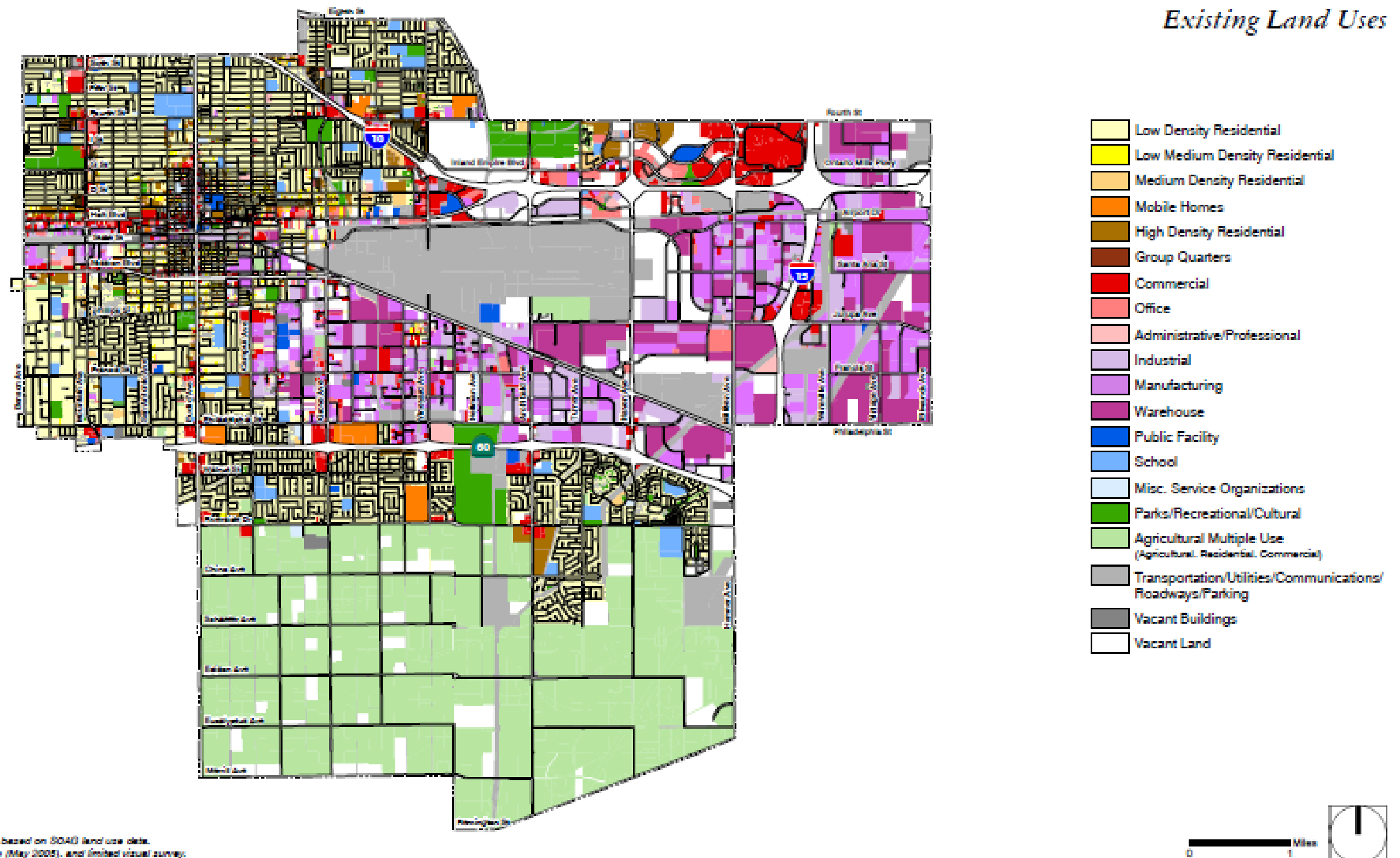


Table 5.2
Ultimate Land Use-1992 General Plan

Land Use	Acres	Assumed Density/ Intensity	Units	Square Feet
Residential				
Rural	384.2	0 to 2 du/acre	768	
Low Density	9,080.7	2 to 4.5 du/acre	38,557	
Low-Medium Density	329.8	5 to 8.5 du/acre	2,803	
Medium Density	1,853.3	8.5 to 18 du/acre	30,638	
Subtotal	11,648.0		72,767	
Mixed Use				
Downtown	71.0	35 du/acre	1,491	989,683
New Model Colony	433.6	18 du/acre	2,341	7,688,493
Subtotal	504.6		3,832	8,678,176
Retail/Service				
Neighborhood Commercial	460.8	0.30 FAR		6,021,734
General Commercial	407.5	0.30 FAR		5,325,210
Office/Commercial	1,066.0	0.75 FAR	1,992	20,157,710
Hospitality	269.9	1.0 FAR		11,756,844
Administrative/ Professional	20.7	0.75 FAR		676,269
Subtotal	2,704.6		1,992	59,609,566
Employment				
Business Park	722.1	0.40 FAR		12,581,870
Industrial	6,781.8	0.55 FAR		162,478,364
Subtotal	7,503.9			175,060,235
Other				
Open Space – Non-recreation	1,371.4	Not applicable		
Open Space – Recreation	959.4	Not applicable		
Open Space–Water	8.2	Not applicable		
Public Facility	116.9	Not applicable		
Public School	604.7	Not applicable		
Los Angeles/Ontario International Airport (LAONT)	1,422.4	Not applicable		
Landfill	220.1	Not applicable		
Railroad	136.9	Not applicable		
Roadways	4,756.9	Not applicable		
Subtotal	9,596.9			
Total	31,958.0		78,592	243,347,977

Source: The Ontario Plan Draft Environmental Impact Report 2009 Table 3-1

Figure 5.2
Ultimate Land Use-1992 General Plan

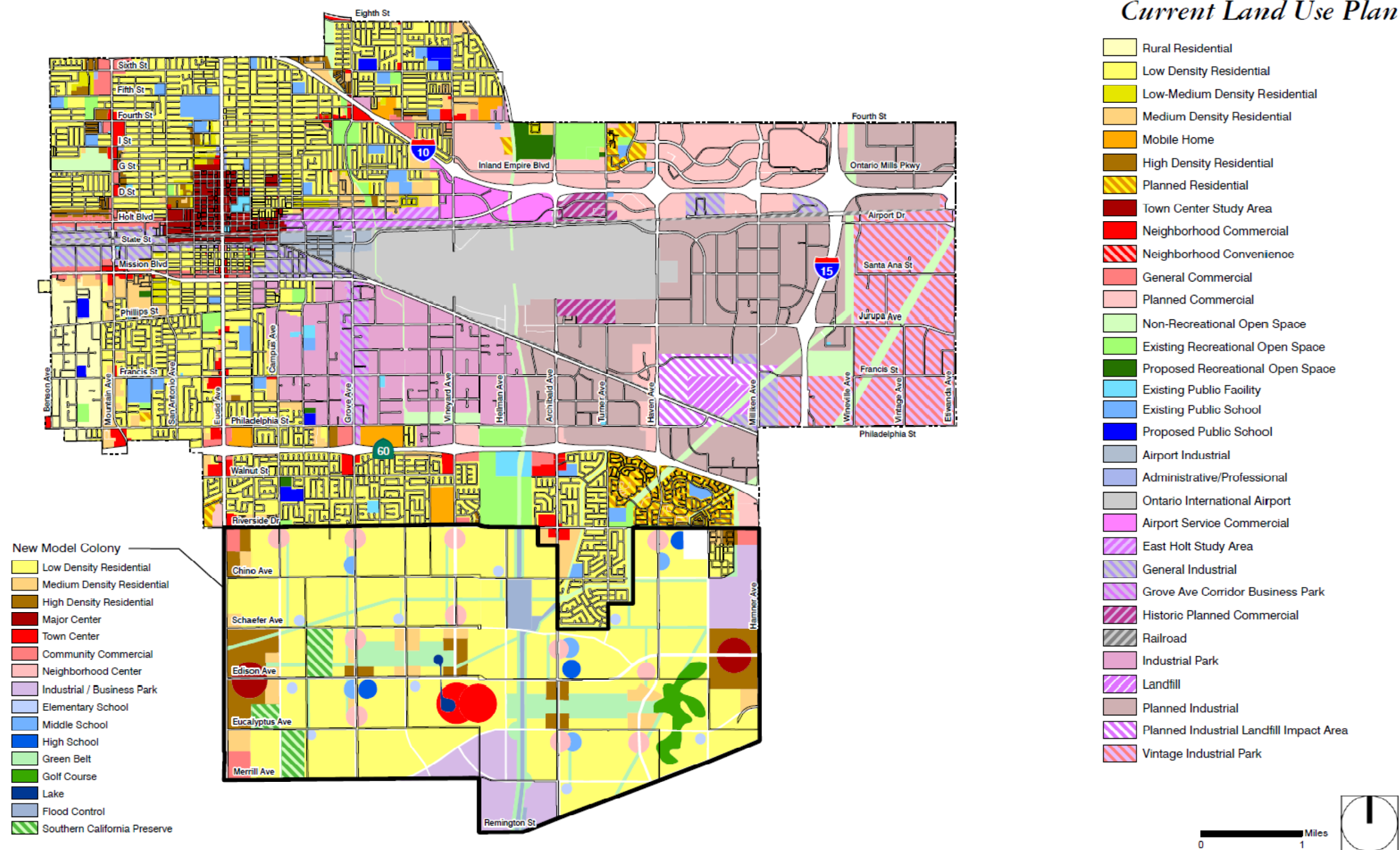


Table 5.3
Ultimate Land Use-The Ontario Plan

Land Use	Acres	Assumed Density/ Intensity	Units	Square Feet
Residential				
Rural	267.4	2 du/ac	535	
Low Density	7,797.2	4.0 du/ac (OMC) 4.5 du/ac (NMC)	32,766	
Low-Medium Density	800.8	8.5 du/ac	6,807	
Medium Density	1,941.3	18.0 du/ac (OMC) 22.0 du/ace (NMC)	39,179	
High Density	238.1	35 du/ac	8,334	
Subtotal	11,045.8		87,620	
Mixed Use				
Downtown	108.5	<ul style="list-style-type: none"> • 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail 	2,279	1,512,403
Euclid Avenue/Francis Street	10.4	<ul style="list-style-type: none"> • 50% of the area at 30 du/ac • 1.0 FAR office and retail 	156	181,210
East Holt Boulevard	54.9	<ul style="list-style-type: none"> • 25% of the area at 30 du/ac • 50% of the area at 1.0 FAR office • 25% of the area at 0.80 FAR retail 	412	1,674,011
Meredith	245.0	<ul style="list-style-type: none"> • 30% of the area at 40 du/ac • 70% at 1.0 FAR for office and retail uses 	2,940	7,470,540
Multimodal Center	76.2	<ul style="list-style-type: none"> • 10% of the area at 60 du/ac • 90% of the area at 1.0 FAR office and retail 	457	2,987,345
Inland Empire Corridor	36.8	<ul style="list-style-type: none"> • 50% of the area at 20 du/ac • 30% of the area at 0.50 FAR office • 20% of the area at 0.35 FAR retail 	368	352,662
Guasti	83.4	<ul style="list-style-type: none"> • 20% of the area at 30 du/ac • 30% of the area at 1.0 FAR retail • 50% of the area at 0.70 FAR office 	500	2,361,388
Ontario Center	344.9	<ul style="list-style-type: none"> • 30% of the area at 40 du/ac • 50% of the area at 1.0 FAR office • 20% of the area at 0.5 FAR retail 	4,139	9,014,306
Ontario Mills	239.5	<ul style="list-style-type: none"> • 5% of the area at 40 du/ac • 20% of the area at 0.75 FAR office • 75% of the area at 0.5 FAR retail 	479	5,477,126

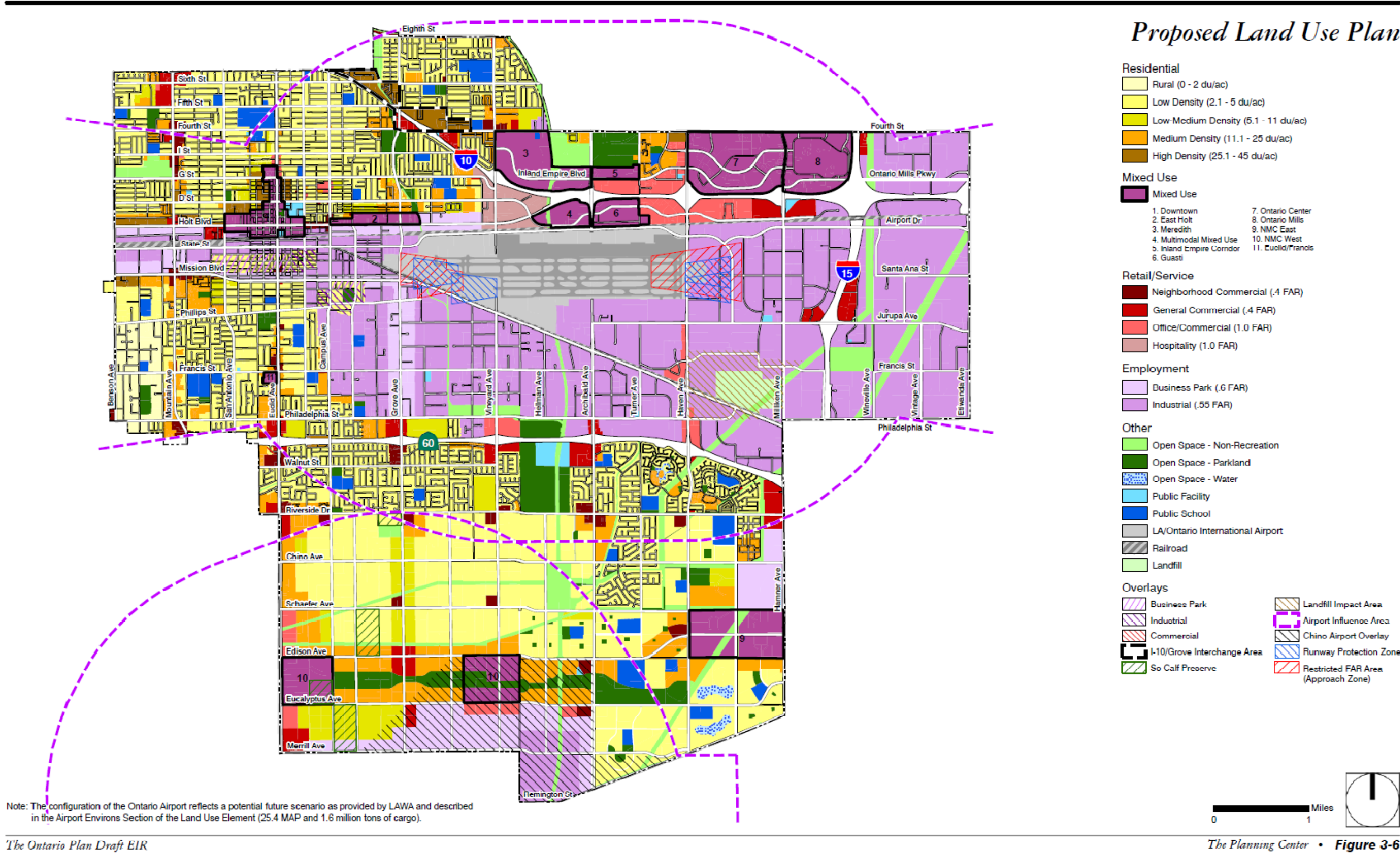
Table 5.3
Ultimate Land Use-The Ontario Plan (continued)

Land Use	Acres	Assumed Density/ Intensity	Units	Square Feet
Mixed Use (continued)				
NMC west	315.8	<ul style="list-style-type: none"> • 30% of the area at 35 du/ac • 70% of the area at 0.7 FAR office and retail 	3,316	6,740,562
NMC east	263.7	<ul style="list-style-type: none"> • 30% of the area at 25 du/ac • 30% of the area at 0.35 FAR for office • 40% of the area at 0.3 FAR for retail uses 	1,978	2,584,524
Subtotal	1,779.1		17,023	40,356,075
Retail/Service				
Neighborhood Commercial	283.6	0.30 FAR		3,706,085
General Commercial	592.7	0.30 FAR		7,745,404
Office/Commercial	525.6	0.75 FAR		17,171,352
Hospitality	144.9	0.75 FAR		6,311,844
Subtotal	1,546.8			34,934,684
Employment				
Business Park	1,269.3	0.40 FAR		22,116,283
Industrial	6,678.3	0.55 FAR		159,998,711
Subtotal	7,947.6			182,114,995
Other				
Open Space – Non-Recreation	1,242.1	Not applicable		
Open Space – Recreation	1,007.6	Not applicable		
Open Space-Water	59.2	Not applicable		
Public Facility	98.6	Not applicable		
Public School	627.2	Not applicable		
Los Angeles/Ontario International Airport (LAONT)	1,422.2	Not applicable		
Landfill	136.9	Not applicable		
Railroad	247.0	Not applicable		
Roadways	4,798.8	Not applicable		
Subtotal	9,639.6			
TOTAL	31,957.9			257,405,756

Source: The Ontario Plan Draft Environmental Impact Report 2009 Table 3-4

Figure 5.3

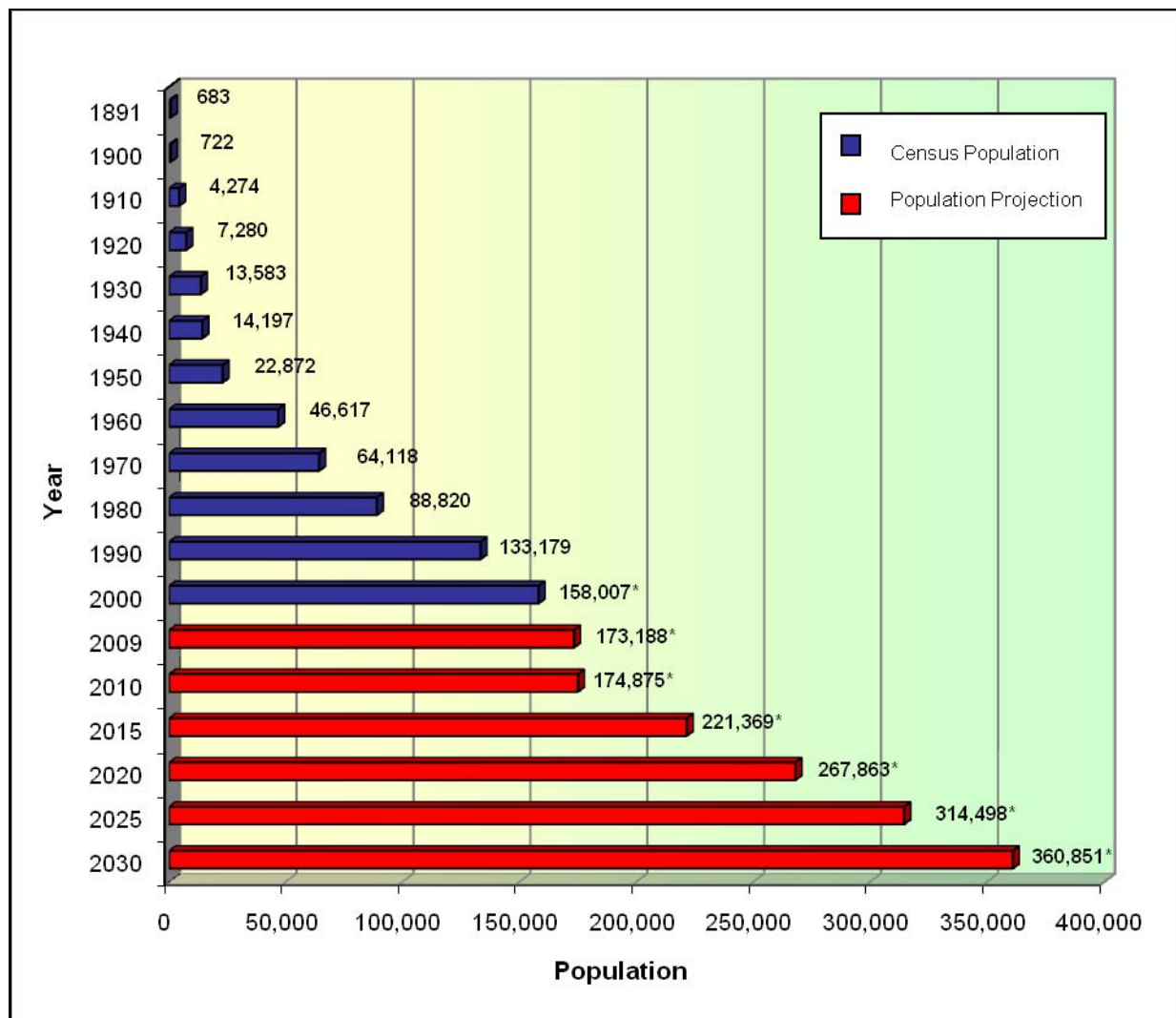
Ultimate Land Use Map based on The Ontario Plan



6.0 POPULATION

Since its incorporation in 1891, the City of Ontario has grown from a population of 683 to approximately 172,701 in 2007 (Ref: *California Department of Finance*). **Figure 6.1** depicts the historical population increases from 1891 to 2009, as well as future projections, based on The Ontario Plan. With the total number of housing units at approximately 47,390 and a 3.67 percent vacancy rate, the population per household is estimated to be 3.793 (Ref: *California Department of Finance*).

Figure 6.1
City of Ontario Existing and Projected Population



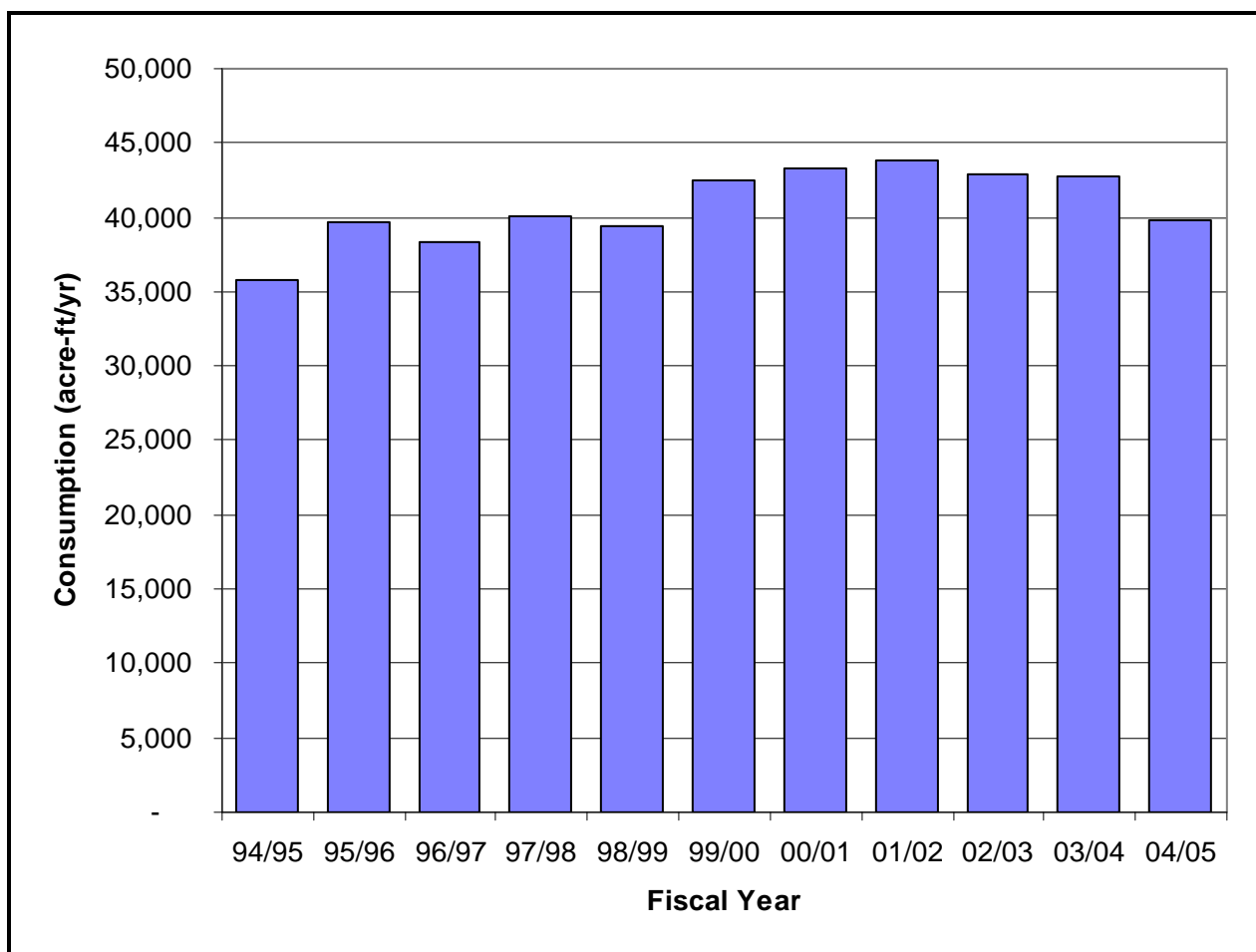
7.0 WATER DEMAND

This section contains information on historical water demand from the 2005 UWMP, an update to show recent existing water demand since the 2005 UWMP and future water demand projections.

7.1 Historical Water Use

Figure 7.1 illustrates the City's historical water use for the 10-year period from fiscal year (FY) 1994/1995 to FY 2004/2005, as presented in the 2005 UWMP. As shown in this figure, the City's water demand has increased from approximately 37,500 acre-feet per year (AFY) in fiscal year (FY) 1994/1995 to approximately 39,800 AFY in FY 2004/2005.

Figure 7.1
Historical Water Use



7.2 Existing Water Use

Table 7.1 contains water production and water consumption data for the 2007 and 2008 calendar years. As shown, the average of annual potable water consumption for 2007 and 2008 is just over 43,000 AF.

Table 7.1
2007 and 2008 Water Production and Consumption

Production/Consumption/Loss	2007	2008	Average
	(AF)		
Potable Water Production	44,806	43,301	44,054
Potable Water Consumption	44,286	42,072	43,179
Recycled Water Consumption	2,974	3,684	3,329
Total Water Consumption	47,260	45,756	46,508
Water Loss	520	1,229	875
Water Loss (%)	1%	3%	2%

7.2 Water Demand Factors

The water demand factors, used in 2006 Water Master Plan Update, have been reviewed and revised to correspond to land use changes in The Ontario Plan. **Table 7.2** contains a list of water demand factors for the 2006 Water Master Plan Update and the 2009 Water Master Plan Update. The new water demand factors are used in this report to calculate water demands that are the basis for this water supply assessment.

Table 7.2
Water Demand Factors

Land Use Category		Water Demand Factors	
		2006 WMP (gpd/ac)	2009 WMP (gpd/ac)
Airport	ARPT	N/A	N/A
Commercial	BP	2,495	2,200
	GC	2,495	2,200
	HOS	2,495	2,200
	NC	2,495	2,200
	OC	2,495	2,200
	PF	4,000	2,200
Residential	RR	3,982	3,520
	LDR	4,141	3,520
	LMDR	4,141	3,825
	MDR	4,248	4,620
	HDR	5,760	6,300
Open Space	OS-NR	4,248	1,000
	OS-R	--	1,000
School	PS	2,600	3,500
Industrial	IND	1,400	2,000
Mixed Use	MU	N/A	8,500

7.3 Guasti Plaza-Additional Water Demand

Land use and corresponding water demand based on the original Guasti Plaza Specific Plan has been included in the 2005 Urban Water Management Plan and Water Master Plan Update. This water supply assessment report evaluates the City's ability to supply water to meet the additional water demand for 500 high density residential proposed under the Amendment to the Guasti Plaza Specific Plan. **Table 7.3** contains additional water demand that will be generated by residential development proposed in the Guasti Plaza Specific Plan Amendment.

Table 7.3

Guasti Plaza-Additional Water Demand Calculation

Land Use Category	High Density Residential	
Density	units/acre	35
Number of Residential Units	units	500
Water Demand Factor	gpd/acre	6,300
	gpd/unit	180
Water Demand	gpd	90,000
Annual Water Consumption	acre-feet	101

7.4 Projected Ultimate Water Demand

For this water supply assessment report, Citywide ultimate water demand is calculated based on The Ontario Plan Land Use and updated water demand factors to be used in the 2009 Water Master Plan Update. **Table 7.4** contains detailed calculation of water demands for each land use category and sub-category in The Ontario Plan.

Table 7.4

Projected Ultimate Water Demand based on The Ontario Plan Land Use

Land Use	Acres	Water Demand Factor	Water Demand	
		(gpd/acre)	(mgd)	(AFY)
Residential				
Rural	267.4	3,520	0.9	1,054
Low Density	7,797.2	3,520	27.4	30,740
Low-Medium Density	800.8	3,825	3.1	3,431
Medium Density	1,941.3	4,620	9.0	10,045
High Density	238.1	6,300	1.5	1,680
Subtotal	11,045.8		41.9	46,950

Table 7.4 (continued)

Projected Ultimate Water Demand based on The Ontario Plan Land Use

Land Use	Acres	Water Demand Factor	Water Demand	
		(gpd/acre)	(mgd)	(AFY)
Mixed Use				
Downtown	108.5	8,500	0.9	1,033
Euclid Avenue/Francis Street	10.4	8,500	0.1	99
East Holt Boulevard	54.9	8,500	0.5	523
Meredith	245.0	8,500	2.1	2,332
Multimodal Center	76.2	8,500	0.6	725
Inland Empire Corridor	36.8	8,500	0.3	350
Guasti	83.4	8,500	0.7	794
Ontario Center	344.9	8,500	2.9	3,283
Ontario Mills	239.5	8,500	2.0	2,280
NMC west	315.8	8,500	2.7	3,006
NMC east	263.7	8,500	2.2	2,510
Subtotal	1,779.1		15.1	16,937
Retail/Service				
Neighborhood Commercial	283.6	2,200	0.6	699
General Commercial	592.7	2,200	1.3	1,460
Office/Commercial	525.6	2,200	1.2	1,295
Hospitality	144.9	2,200	0.3	357
Subtotal	1,546.8		3.4	3,811
Employment				
Business Park	1,269.3	2,200	2.8	3,128
Industrial	6,678.3	2,000	13.4	14,959
Subtotal	7,947.6		16.1	18,087
Other				
Open Space – Non-Recreation	1,242.1	1,000	1.2	1,391
Open Space – Recreation	1,007.6	1,000	1.0	1,129
Open Space-Water	59.2	-	0.0	-
Public Facility	98.6	2,275	0.2	251
Public School	627.2	3,500	2.2	2,459
Los Angeles/Ontario International Airport (LAONT)	1,422.2	2,200	3.1	3,504
Landfill	136.9	-	0.0	-
Railroad	247.0	-	0.0	-
Roadways	4,798.8	-	0.0	-
Subtotal	9,639.6		7.8	8,734
TOTAL	31,957.9		84.4	94,519

7.5 Comparison of Ultimate Water Demand Projections

Table 7.5 compares the updated ultimate water demand projections with the 2005 UWMP/2006 Water Master Plan ultimate water demand projections and ultimate water demand projections contained in Appendix I of The Ontario Plan Draft EIR. As shown in the table, the updated ultimate water demand projections are slightly higher than the 2005 UWMP/2006 Water Master Plan projections and slightly lower than The Ontario Plan Draft EIR projections.

Table 7.5
Comparison of Ultimate Water Demand Projections

Ontario Ultimate Water Demand Projections			
Source	Potable (acre-feet)	Recycled (acre-feet)	Total (acre-feet)
2005 UWMP/2006 Water Master Plan	78,938	14,492	93,430
The Ontario Plan (2006 demand factors)	81,679	15,921	97,600
The Ontario Plan (2009 demand factors)	79,859	14,659	94,519

8.0 WATER SUPPLY

8.1 Groundwater Rights

Groundwater rights are defined by the 1978 judgment in the case *Chino Basin MWD v. City of Chino, et al.* The judgment is administered by a watermaster and is subject to the on-going court jurisdiction. The original watermaster, the Chino Basin Municipal Water District (now known as IEUA), was replaced in 1998 by a nine-member board made up of representatives of the basin pumpers, designated the Chino Basin Watermaster (CBWM). The judgment defined the safe yield of the basin to be 140,000 AFY. **Appendix B-1** contains a copy of the 1978 judgment

The water rights of the Chino Basin are allotted to three pools: the Overlying (Agricultural) Pool, the Overlying (Non-agricultural) Pool, and the Appropriative Pool. The Overlying (Agricultural) Pool consists of private property owners with land being used for agricultural activities and the State of California detention centers. The Overlying (Non-Agricultural) Pool consists of businesses and industries, and the Appropriative Pool consists of cities and water agencies that supply water to their customers. Water rights are divided for the City between the three pools as follows:

Overlying (Agricultural) Pool:	82,800 AFY
Overlying (Non-Agricultural) Pool:	7,366 AFY
Appropriative Pool:	49,834 AFY
<hr/>	
Total Water Rights:	140,000 AFY

The City has water rights based on 20.742 percent of the Initial Operating Safe Yield (OSY), permanent conversion of agricultural land, temporary transfers of unpumped water from the Overlying (Agricultural) Pool, and the safe yield reallocation of the Agricultural Pool.

Appendix B-2 contains excerpts from the Chino Basin Watermaster Final Assessment Package dated November 20, 2008 that pertain to Ontario water production. As shown in the Watermaster Final Assessment Package, the City had total Chino Basin production rights of 34,251 acre-feet in Production Year 2007-2008. These production rights included:

Safe Yield and Carryover	20,820 acre-feet
Agricultural Pool Reallocation	7,727 acre-feet
Water Transactions	3,215 acre-feet
New Yield	2,489 acre-feet
<hr/>	
Total Ontario 2007-2008 Production Rights	34,251 acre-feet

The water transactions include a one-time 3,135 acre-feet lease/assigned rights purchase in the 2007-2008 production year. As an Appropriative Pool Member, Ontario's Chino Basin Water Rights increase by 2 acre-feet per acre for every acre of land converted from agricultural use that is developed as an urban land use.

8.2 Groundwater Production

Table 8.1 lists the City owned and operated groundwater wells in the Chino Basin.

Table 8.1
Existing Well Production

Well No	Status	Capacity (gpm)	Well No	Status	Capacity (gpm)
3	Inactive	801	36	Active	1,566
4	Inactive	1,239	37	Active	2,925
9	Inactive	1,832	38	Active	2,377
11	Inactive	1,357	39	Active	2,195
15	Inactive	1,556	40	Active	3,288
16	Active	644	41	Active	2,576
17	Active	1,274	42	Future	2,500
20	Active	758	43	Future	3,000
24	Active	1,626	44	Active	2,500
25	Active	1,407	45	Active	2,500
26	Active	756	46	Active	2,500
27	Active	1,097	47	Active	2,500
29	Active	2,629	48	Future	2,500
30	Active	2,367	49	Active	2,300
31	Active	2,944	50	Inactive	2,300
34	Active	1,572	51	Future	2,500
35	Active	2,709	52	Active	2,500
Total Capacity (active wells)					49,510
Total Capacity (all wells)					69,095

The City's total groundwater pumping capacity of all active wells is 49,510 gpm. The following table presents the amount of annual groundwater production that active wells can supply at 50%, 75% and 100% utilization rates:

Well Capacity Utilization Rate	Annual Well Production (acre-feet)
100%	79,850
75%	59,887
50%	39,925

The City has sufficient well capacity to pump to supply its entire annual groundwater production in a typical year using less than 50 percent of total well capacity. With inactive and future wells, the

City's annual groundwater production increases as follows:

Well Capacity Utilization Rate	Annual Well Production (acre-feet)
100%	111,436
75%	83,577
50%	55,718

All future wells listed in **Table 8.1** are scheduled to be constructed and active by 2015. In addition to these wells, the 2006 WMP capital improvement program recommends construction of 5 additional wells to meet ultimate water demand.

8.3 Chino Desalter Authority

The City of Ontario is a member of the Chino Desalter Authority (CDA), a joint powers agency created on September 25, 2001, between Jurupa Community Services District (JCSD), Santa Ana River Water Company (SAWRC), Inland Empire Utilities Agency (IEUA) and the cities of Chino, Chino Hills, Norco, and Ontario. The CDA operates and maintains two treatment facilities, Chino Desalter I (CDA-I) and Chino Desalter II (CDA-II), to treat brackish groundwater, high in nitrates and TDS. The groundwater is treated to meet potable water standards and delivered to CDA member agencies. Ontario currently owns and takes delivery of 1,500 acre-feet in CDA-I and 3,500 acre-feet in CDA-II for a total combined annual CDA water supply of 5,000 acre-feet. Ontario has agreed to purchase an additional 3,533 acre-feet in the upcoming CDA-II expansion project. Ontario's total CDA water supply will increase to 8,533 acre-feet by 2015. **Appendix C** contains a copy of the Water Purchase Agreement between the City of Ontario and the CDA.

8.4 Imported Water-Water Facilities Authority

The Water Facilities Authority (WFA) operates the Aqua de Lejos Water Treatment Plant, located in the City of Upland. The plant treats raw imported SWP water from MWD through the Rialto Reach of the Foothill Feeder. At the time of its construction in 1988, the plant had an initial capacity of 68 million gallons per day (mgd). The plant is a conventional water treatment plant featuring coagulation, flocculation, sedimentation, filtration and chloramine disinfection. The plant has been re-rated several times and has a current capacity of 81 mgd. The City owns 31.4 percent of the plant capacity or 25 mgd. The City of Ontario purchases imported water from the WFA. There are two connections designated Ontario #1 (15 mgd capacity), and Ontario #2 (10 mgd capacity) that supply the City water system. **Appendix D-1** contains a copy of the Installment Purchase Agreement between the City of Ontario and the WFA. **Appendix D-2** contains a copy of a State Department of Health Services letter and resolution approving a capacity increase in the WFA Plant based on approval of increased filtration rates.

8.4 Recycled Water

IEUA collects and treats wastewater at four regional wastewater reclamation plants and is the

wholesale seller of recycled water to the City of Ontario. In turn, the City sells recycled water to its retail water service customers. Recycled water is an important component in the City's future water supply portfolio. Recycled water used for irrigation and other non-potable commercial and industrial uses reduces the City's potable water demand significantly. The City of Ontario has been rapidly expanding its recycled water customer base. The City recycled water deliveries in 2007 and 2008 totaled 2,974 and 3,684 acre-feet, respectively. The City's annual recycled water demand is projected to increase to 14,659 acre-feet by 2030.

8.5 Dry Year Yield Shift Obligation

In 2003, the City executed an agreement with IEUA to participate in the Dry Year Yield (DYY) program. A participating agency in the DYY program agrees to reduce its use of imported water compared to the prior year by a fixed amount, known as the agency's "shift obligation". The City's shift obligation is 8,076 AFY. In a dry year, City has agreed to reduce its WFA imported water supply by 8,076 AFY and use its DYY wells and treatment facility to increase groundwater production to offset the reduction in imported water supply. Single and multiple dry year supply and demand analyses are included in the next section of this report.

8.6 Water Supply Projections-Normal Year

Table 8.2 lists detail citywide water supply projections in 5-year increments.

Table 8.2
Water Supply Projections in 5 Year Increments

	2010	2015	2020	2025	2030
Chino Basin Groundwater Rights					
Initial Safe Yield	11,374	11,374	10,337	10,337	10,337
Annual Early Transfers	6,803	6,803	6,803	6,803	6,803
Ag Pool Reallocation (Land Use Conversions)	4,727	6,924	10,134	13,348	16,562
Adjustment to Total Available	(910)	(1,111)	(1,313)	(1,514)	(1,716)
New Yield	2,489	2,489	2,489	2,489	2,489
Total Share of Initial OSY	24,483	26,479	28,450	31,463	34,475
Chino Basin Groundwater Basin-Purchased Rights and Recharge					
SAWC Shares	765	765	765	765	765
Water Rights Purchase-Sunkist	1,851	1,851	1,851	1,851	1,851
Recharge-Ontario	4,500	6,085	6,815	8,519	8,519
Recharge-Purchase from Fontana	1,250	2,100	2,400	3,000	3,000
Other Water Rights Leases & Recharge	-	-	-	-	-
Chino Desalter Authority (CDA) Plants	5,000	8,533	8,533	8,533	8,533
Total Groundwater Supply	37,849	45,813	48,814	54,131	57,143
Imported Water					
Water Facilities Authority (WFA) Plant	19,800	19,850	19,900	19,950	20,000
Recycled Water					
Supply (equal to retail recycled water demand)	4,052	6,704	9,356	12,007	14,659
Total Water Supply	61,701	72,367	78,070	86,088	91,802

9.0 DRY YEAR WATER SUPPLY AND DEMAND ANALYSES

This section presents water supply and demand calculations under normal year, single dry year and multiple dry year conditions. The following key assumptions are incorporated into the normal year analysis:

- Potable and recycled water demand are calculated using TOP land use and new water demand factors that will be included in the 2009 WMP Update.
- WFA Water Supply increases to approximately 19,850 AF by 2015 per the 2005 UWMP.
- CDA Water Supply increases to 8,533 AF in 2015.

9.1 Water Supply and Demand Comparison-Normal Year

Table 9.1 presents the normal year water supply demand analysis under normal year conditions.

Table 9.1
Normal Year Water Supply and Demand

Demand/Supply	Year				
	2010	2015	2020	2025	2030
Water Demands	(acre-feet)				
Potable Water Demand	48,833	56,590	64,346	72,103	79,859
Base Conservation	-2,635	-3,994	-4,900	-6,149	-7,747
Recycled Water Demand	4,052	6,704	9,356	12,007	14,659
Total Water Demand w/Base Conservation	50,251	59,300	68,802	77,961	86,771
Water Supply	(acre-feet)				
Groundwater - Ontario GW Rights	24,483	26,479	28,450	31,463	34,475
Groundwater - SAWC & Sunkist Rights	2,616	2,616	2,616	2,616	2,616
Groundwater-CDA Supply	5,000	8,533	8,533	8,533	8,533
Groundwater-Recharge	5,750	8,185	9,215	11,519	11,519
Groundwater-Lease/Purchase Transactions	0	0	0	0	0
Imported Water-WFA	19,800	19,850	19,900	19,950	20,000
Potable Water-Supply	57,649	65,663	68,714	74,081	77,143
5% Water Loss-Potable	-2,882	-3,283	-3,436	-3,704	-3,857
Net Potable Water Supply	54,767	62,380	65,278	70,377	73,286
Recycled Water	4,052	6,704	9,356	12,007	14,659
Total Water Supply	61,701	72,367	78,070	86,088	91,802
Total Water Supply w/5% water loss	58,819	69,084	74,634	82,384	87,945
Surplus or (Deficiency)	(acre-feet)				
The Ontario Plan	8,568	9,784	5,832	4,423	1,174
Guasti Plaza-New Demand	101	101	101	101	101
The Ontario Plan (w/GP-New Demand)	8,467	9,683	5,731	4,322	1,073

9.2 Dry Year Analysis-2010-2015 Water Supply and Demand

Table 9.2 presents the 2010-2015 water supply demand analysis under normal year, single and multiple dry year and conditions.

Table 9.2

2010-2015 Single and Multiple Dry Year Water Supply-Demand Analysis

Year	2010	2010	2011	2012	2013
Climate Condition	Normal	Single	Multiple Dry Years		
			Year 2	Year 3	Year 4
Water Supply	(acre-feet)				
Groundwater Supply	37,849	48,625	50,165	47,355	48,746
Imported Water Supply (WFA)	12,372	4,296	4,296	4,296	4,296
Recycled Water Supply	4,052	4,052	4,582	5,113	5,643
Supply total	54,273	56,973	59,043	56,764	58,685
5% Water Loss	(2,511)	(2,646)	(2,723)	(2,583)	(2,652)
Supply total	51,762	54,327	56,320	54,181	56,033
Water Demands	(acre-feet)				
Potable Water Demand-Normal	48,833	-	-	-	-
Potable Water Demand-High		52,789	54,466	56,143	57,820
Base Conservation	(2,635)	(2,635)	(2,907)	(3,179)	(3,451)
Additional Conservation	-	-	-	(5,614)	(5,782)
Recycled Water Demand	4,052	4,052	4,582	5,113	5,643
Demand total	50,250	54,206	56,141	52,463	54,230
Guasti Plaza-New Demand	101	101	101	101	101
Demand total (incl. Guasti Plaza-New Demand)	50,351	54,307	56,242	52,564	54,331
Difference	4,023	121	179	1,719	1,803
Difference (incl. Guasti Plaza-New Demand)	3,922	20	78	1,618	1,702
Increase in Groundwater Supply	(acre-feet)				
Dry Year Shift Obligation	-	8,076	8,076	8,076	8,076
Lease/Purchase/Replenishment	-	2,700	3,300	-	-
Net GW Supply Increase	-	10,897	11,197	6,357	6,273
Net GW Supply Increase (incl. Guasti Plaza-New Demand)	-	10,756	11,298	6,458	6,374

In normal year 2010, the total of the City's groundwater production rights of 37,849 AF and normal imported water supply of 12,372 AF provides a surplus of available water supply. In any dry year, the City must cut imported water supply by 8,076 AF to meet its dry year shift obligation. In single dry year 2010, the City must pump 8,076 AF shift obligation plus an additional 2,680 AF of groundwater for a total groundwater supply increase of 10,756 AF to meet projected water demands. In multiple dry year 2011, the City must pump 8,076 AF shift obligation plus an additional

3,222 AF of groundwater for a total groundwater supply increase of 11,298 AF to meet projected water demands. In multiple dry years 2012 and 2013, net groundwater pumping actually decreases below the 8,076 AF dry year shift obligation to 6,458 AF and 6,374 AF, respectively. This decrease occurs due to the projected 10 percent additional water conservation that is implemented in the second year of a multiple dry year period.

9.3 Dry Year Analysis-2025-2030 Water Supply and Demand

Table 9.3 presents the 2025-2030 water supply demand analysis under normal year, single and multiple dry year and conditions.

Table 9.3					
2025-2030 Single and Multiple Dry Year Water Supply-Demand Analysis					
Year	2030	2030	2026	2027	2028
Climate Condition	Normal	Single	Multiple Dry Years		
			Year 2	Year 3	Year 4
Water Supply	(acre-feet)				
Groundwater Supply	57,143	71,019	65,269	63,412	64,014
Imported Water Supply (WFA)	20,000	11,884	11,884	11,894	11,904
Recycled Water Supply	14,659	14,659	12,537	13,068	13,598
Supply total	91,802	97,562	89,690	88,374	89,516
5% Water Loss	(3,857)	(4,145)	(3,858)	(3,765)	(3,796)
Supply total	87,945	93,417	85,832	84,609	85,720
Water Demands	(acre-feet)				
Potable Water Demand-Normal	79,859	-	-	-	-
Potable Water Demand-High	-	86,328	79,620	81,297	82,974
Base Conservation	(7,747)	(7,747)	(6,469)	(6,788)	(7,108)
Additional Conservation	-	-	-	(8,130)	(8,297)
Recycled Water Demand	14,659	14,659	12,537	13,068	13,598
Demand total	86,771	93,240	85,688	79,447	81,167
Guasti Plaza-New Demand	101	101	101	101	101
Demand total (incl. Guasti Plaza-New Demand)	86,872	93,341	85,789	79,548	81,268
Difference	1,174	177	144	5,161	4,554
Difference (incl. Guasti Plaza-New Demand)	1,073	76	43	5,060	4,453
Increase in Groundwater Supply	(acre-feet)				
Dry Year Shift Obligation	-	8,076	8,076	8,076	8,076
Lease/Purchase/Replenishment	-	5,800	50		-
Net GW Supply Increase	-	13,699	7,982	2,915	3,523
Net GW Supply Increase (incl. Guasti Plaza-New Demand)	-	13,800	8,083	3,016	3,624

In normal year 2030, the total of the City's groundwater production rights of 57,143 AF and normal imported water supply of 20,000 AF provides a surplus of available water supply. In single dry year 2030, the City must pump the 8,076 AF dry year shift obligation plus an additional 5,724 AF of groundwater for a total groundwater supply increase of 13,724 AF to meet projected water demands. In multiple dry year 2026, net groundwater pumping slightly increases above the dry year shift obligation to 8,083 AF. In multiple dry years 2027 and 2028, net groundwater pumping decreases below the 8,076 AF dry year shift obligation to 3,016 AF and 3,624 AF, respectively. The 2027 and 2028 decreases occur due to the projected 10 percent additional water conservation that is implemented in the second year of a multiple dry year period.

9.4 Governor's Proclamation: State of Emergency – Water Shortage

On February 27, 2009, the Governor issued a proclamation declaring an emergency water shortage in the State of California. The Governor's proclamation includes a request for urban water users to "immediately increase their water conservation activities in an effort to reduce their individual water use by 20 percent." The multiple dry year analysis in this report was prepared assuming 10 percent reduction in water demand is achieved thru public notification and water conservation during the second and the third years of a multiple dry year period. A 10 percent water demand reduction thru water conservation is a more conservative assumption for evaluating water supply adequacy during a dry year period.

10.0 WATER SUPPLY ASSESSMENT

The City of Ontario obtains its potable water supply from two sources: groundwater pumped from the Chino Basin and imported water treated and supplied from the WFA Plant. The City has entered into a Dry Year Yield Agreement whereby it has agreed to reduce delivery of imported water supply by 8,076 AF in a single dry year or up to three consecutive multiple dry years. The City is able to meet its dry year shift obligation by increasing its groundwater production in the Chino Basin. In recent years, the City has typically purchased or leased unused water rights from other parties in the agricultural or appropriative pools. The ability to purchase or lease additional water rights and the ability to purchase replenishment water to offset pumping in excess of its water rights provides the City with adequate water supply to meet its dry year shift obligation currently and in future years,

Based on review of the Guasti Specific Plan Amendment and the water supply and demand analyses performed in this study, it is concluded that the City of Ontario has sufficient water supply available to meet 101 AF of water demand for the proposed additional residential development in the Guasti Plaza Specific Plan Amendment