

## TABLE OF CONTENTS

<b>SECTION 1 - INTRODUCTION.....</b>	<b>1-1</b>
1.1 Introduction and Purpose _____	1-1
Law _____	1-1
1.2 Project _____	1-3
Project Location _____	1-3
Site Description _____	1-3
Land Uses _____	1-4
1.3 Proposed Project Relation to 2010 Urban Water Management Plan _____	1-11
Law _____	1-11
1.4 Methodologies of Analysis _____	1-15
<b>SECTION 2 - WATER DEMAND ANALYSIS.....</b>	<b>2-1</b>
2.1 Location _____	2-1
2.2 Pressure Zones _____	2-3
2.3 Land Use _____	2-5
Existing Land Use _____	2-5
Ultimate Land Use _____	2-6
Residential Land Uses _____	2-10
Retail/Service _____	2-10
Employment _____	2-10
Open Space _____	2-11
Public _____	2-11
Other _____	2-11
2.4 Forecast of Ultimate Water Demand _____	2-11
2.5 Water Use Sectors _____	2-12
Landscape _____	2-14
2.6 Project Water Demand _____	2-14

<b>SECTION 3 - WATER SUPPLY ANALYSIS .....</b>	<b>3-1</b>
Law .....	3-1
3.1. Current and Recorded Water Supply Sources .....	3-2
3.2. Description of All Water Supply Projects .....	3-5
Dry Year Yield Project: .....	3-5
Water Facilities Authority: .....	3-7
Chino Basin Desalting Authority: .....	3-8
City Well Production: .....	3-11
Recycled Water: .....	3-11
3.3. Comparison of Supply and Demand .....	3-14
<b>SECTION 4 - GROUNDWATER ANALYSIS.....</b>	<b>4-1</b>
Law .....	4-1
4.1 Introduction .....	4-3
4.2. Review of Urban Water Management Plan (Section 10910 (f)(1)) .....	4-3
4.3. Description of Chino Groundwater Basin and Legal Right to Pump (Section 10910 (f)(2)) .....	4-5
A. Description of Chino Groundwater Basin .....	4-5
B. Legal Right to Pump from the Chino Groundwater Basin .....	4-7
4.4. Historic Use of Groundwater by the City of Ontario (Section 10910(f)(3)) .....	4-11
4.5. Projected Use of Groundwater by the City of Ontario (Section 10910(f)(4)) .....	4-13
4.6. Sufficiency of Groundwater Basin (Section 10910 (f)(5)) .....	4-14
<b>SECTION 5 - Primary Issue for Assessment .....</b>	<b>5-1</b>
Findings .....	5-1

**TABLES**

Table 1-1: Meredith International Centre Land Use Summary _____	1-10
Table 1-2: Projected Water Demand of the Meredith “Mixed Use Plan” Based Upon “The Ontario Plan” _____	1-14
Table 1-3: Meredith International Centre Water Demand Based Upon Table 2.5-1 “Meredith International Centre SPA Proposed Land Uses” _____	1-16
Table 2-1: City of Ontario Pressure Zone Descriptions and Acreage _____	2-4
Table 2-2: City of Ontario Existing Land Uses _____	2-6
Table 2-3: City of Ontario Ultimate Study Area Land Use _____	2-8
Table 2-4: City of Ontario Future Domestic Water Unit Demand Factors _____	2-13
Table 2-5: City of Ontario Projected Water Demand for Mixed Use Area 12 _____	2-16

**FIGURES**

Figure 1-1: Regional Location – Meredith International Centre _____	1-5
Figure 1-2: Project Vicinity – Meredith International Centre _____	1-6
Figure 1-3: Site Topography - Meredith International Centre _____	1-7
Figure 1-4: Existing Land Uses – Meredith International Centre _____	1-8
Figure 1-5: Conceptual Site Plan - Meredith International Centre _____	1-9
Figure 2-1: City of Ontario Pressure Zone Boundaries _____	2-2
Figure 2-2: Existing Land Use Map _____	2-7
Figure 2-3: City of Ontario Ultimate Land Use Map _____	2-9
Figure 4-1: Chino Basin Management Zones _____	4-6
Figure 4-2: City of Ontario Existing Water System _____	4-12

**APPENDICES (available in attached CD)**

- A. City of Ontario 2010 Urban Water Management Plan by AKM Consulting Engineers, June 2011
- B. June 2011 City of Ontario Resolution 2011- 039 adoption of the 2010 Urban Water Management Plan, June 21, 2011
- C. City of Ontario's Water Master Plan by AKM Consulting Engineers, April 2012
- D. Technical Memorandum "Ultimate Citywide Water Demand Estimate" by AKM Consulting Engineers, August 2011
- E. "Local Agency Agreement" dated April 15, 2003 by and Among Inland Empire Utilities Agency and the City of Ontario
- F. "Installment Purchase Agreement Relating to Water Facilities Authority Water Treatment Plant" By and Between Water Facilities Authority, as Seller and the City of Ontario, as Purchaser Dated as of October 1, 1985
- G. California Department of Health Services Letter of August 16, 1999 Pertaining to "Permit Amendment – Increased Filtration Rate" (System No. 3610006)
- H. Ordinance No. 99-07-02 "Ordinance of the Water Facilities Authority – JPA Repealing Ordinance 96-09-01", July 15, 1999
- I. Adjudication Documents

## **SECTION 1 - INTRODUCTION**

### **1.1 Introduction and Purpose**

In October of 2001, Senate Bill (SB) 610 was signed into California state law with an effective date of January 1, 2002. SB 610 serves to amend existing legal requirements for confirmation of water supply sufficiency as a condition of approval for development projects. The confirmation of water supply sufficiency is achieved through an analysis of the water purveyor's existing and future water sources and existing and projected water demand in relation to a "project" as defined by SB 610, resulting in the production of a project-specific Water Supply Assessment (WSA). The WSA also requires additional analysis if any portion of the water purveyor's water supplies include groundwater.

#### **Law**

10910. (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

10912. For the purpose of this part, the following terms have the following meanings:

(a) "Project means any of the following:

(1) A proposed residential development of more than 500 dwelling units.

- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- (4) A proposed hotel or motel, or both, having more than 500 rooms.
- (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Since the Meredith International Centre includes the construction of 4,150,000 square feet of industrial and urban commercial development, 800 residential units, and 600 overnight lodging units the requirements of SB 610 apply to this "Project".

The requirements of SB 610 are triggered for projects going through the California Environmental Quality Act (CEQA) process. During the CEQA process, the City or County processing the project is required to request a Water Supply Assessment from the identified water purveyor for any "project," as defined by SB 610. Pursuant to the above Senate Bill, the Ontario Municipal Utilities Company commissioned (June 2, 2014) this study to address the "Water Supply Assessment" per Senate Bill 610 for the Meredith International Centre.

## 1.2 Project

### *Project Location*

The Meredith International Centre (Project) encompasses approximately 257.7 acres, located in the City of Ontario, in San Bernardino County. The site is generally located north of Interstate 10 (I-10), between Vineyard Avenue on the west, and Archibald Avenue on the east. The northern boundary of the site, between Vineyard Avenue and Cucamonga Creek Channel, is formed by 4<sup>th</sup> Street. Existing San Bernardino County Flood Control facilities form the northern boundary for the portion of the site located east of Deer Creek Channel. Please refer to Figure 1-1, “Regional Location” and Figure 1-2, “Project Vicinity.”

### *Site Description*

The Project site consists of approximately 257.7 acres of vacant and occupied land. The topography of the project site is generally flat with an elevation ranging from approximately 1030-feet to 990-feet above mean sea level (Figure 1-3). Existing land uses are presented in Figure 1-4. As shown, the site remains largely vacant, with the exception of a small school use and existing commercial uses. The Italo M. Bernt Elementary School is located on 2.0 acres, along the site’s 4<sup>th</sup> Street frontage. The school parcel was not part of the original 1981 approved Specific Plan, and is identified within the SPA as “Planning Area 1A”. The

northwest corner of Archibald Avenue and Inland Empire Boulevard, identified herein as “Planning Area 5”, contains existing commercial uses.

Cucamonga Creek Channel and Deer Creek Channel, both concrete-lined flood control channels, traverse the central portion of the site in a north/south alignment. Inland Empire Boulevard crosses through the southern portion of the site in an east/west direction. The remainder of the Specific Plan area consists of relatively flat, vacant land.

### ***Land Uses***

The Planning Areas and associated land uses listed in Table 1-1 are graphically shown in Figure 1-5.



Path: G:\2014\14-0145\GIS\Regional.mxd

Figure 1-1 – Regional Location Map

Meredith International Centre



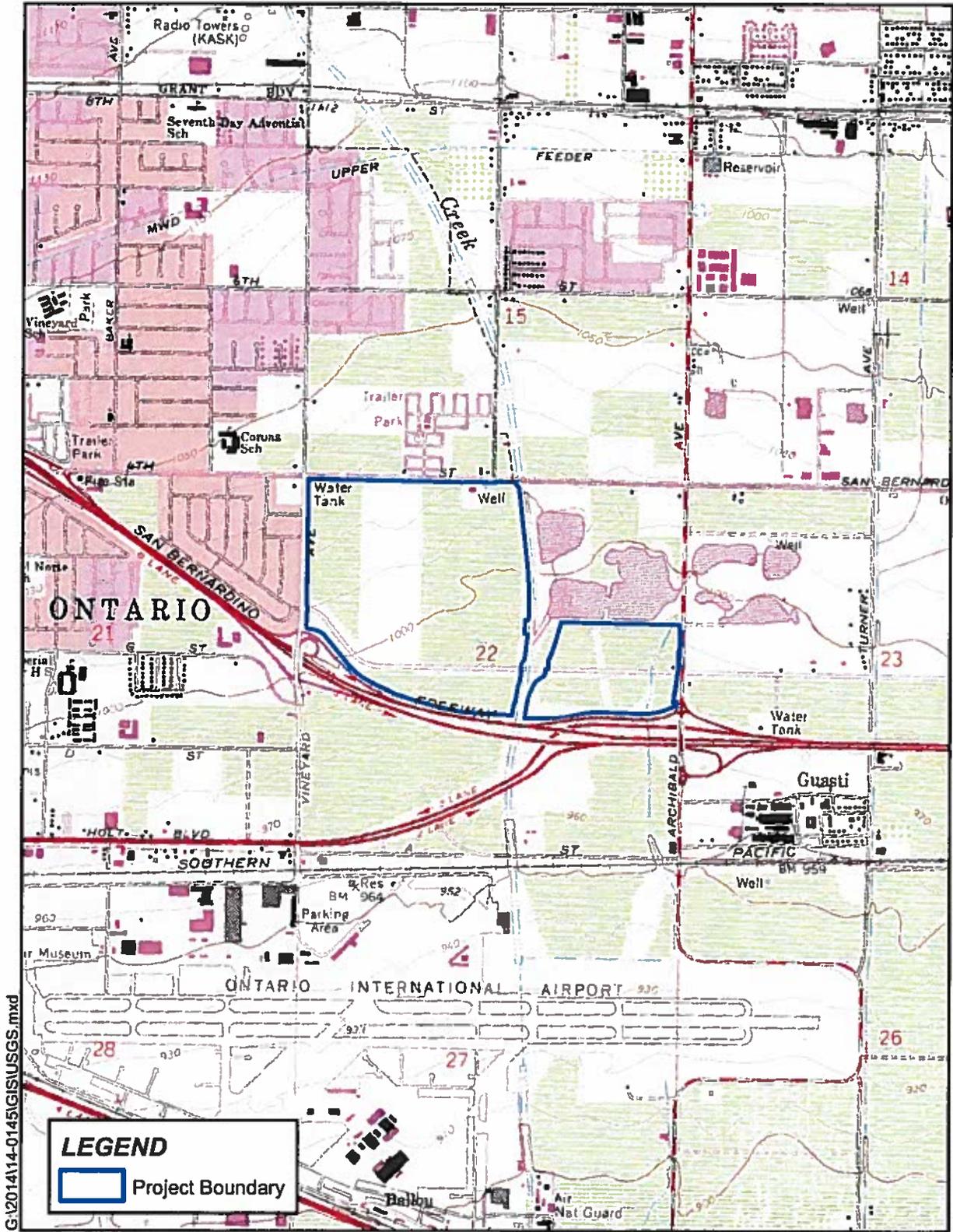


Source: County of San Bernardino ISD, 2012 (imagery) and 2014 (GIS data).

**Figure 1-2 – Project Vicinity**  
 Meredith International Centre

0 500 1,000 1,500 2,000  
 Feet





Source: USGS 7.5min DRG: GUASTI

Figure 1-3 – Site Topography  
Meredith International Centre

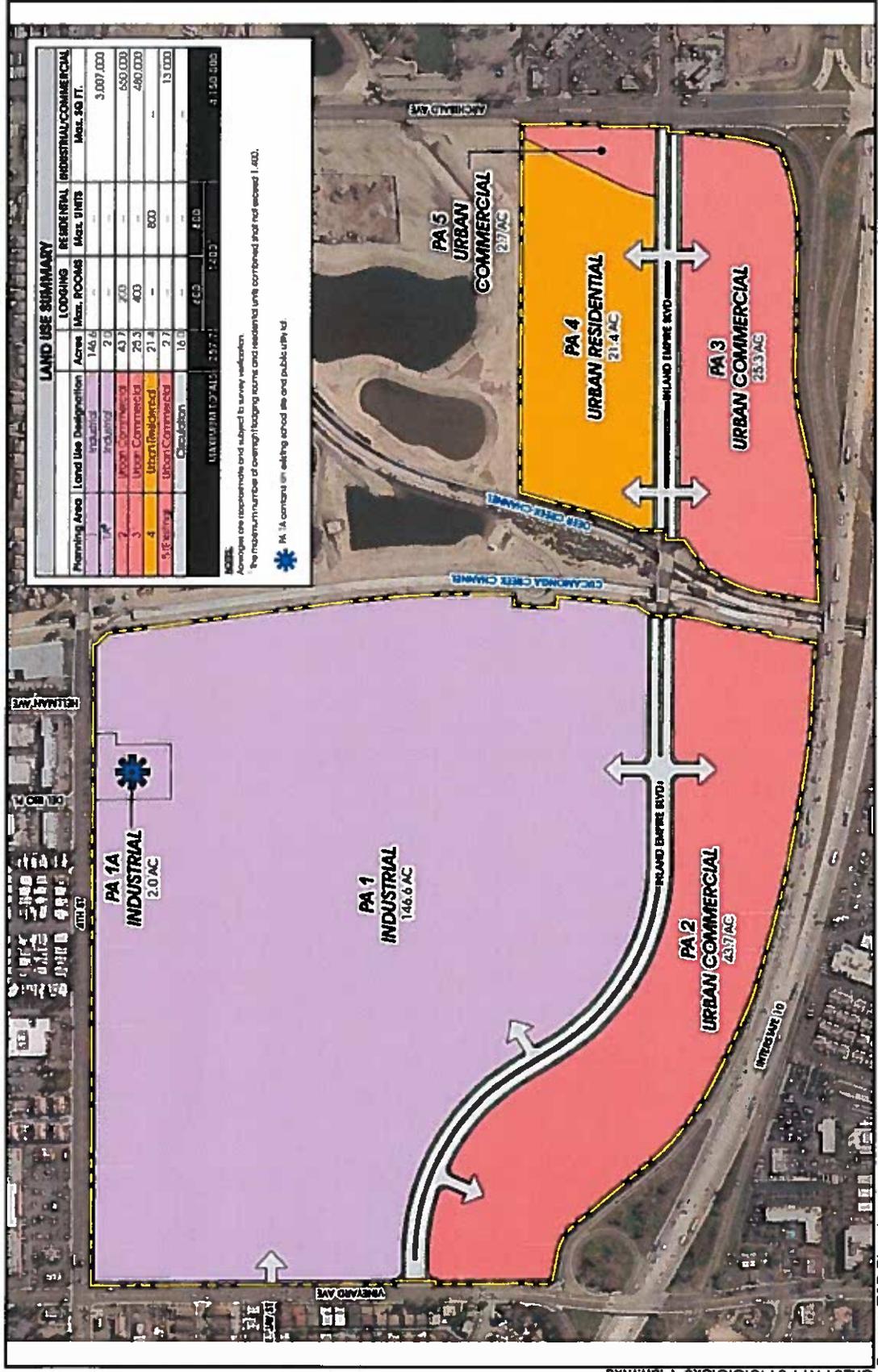
0 1,000 2,000 3,000 Feet





**Figure 1-4 – Existing Land Uses**  
 Meredith International Centre

G:\2014\14-0145\GIS\General Ex LU.mxd



**Figure 1-5 – Conceptual Site Plan**  
 Meredith International Centre

Source: T&B Planning,  
 Applied Planning, 2014

**Table 1-1<sup>1</sup>: Meredith International Centre Land Use Summary**

Planning Area	Land Use	Acreage	Square Footage	Residential Units	Overnight Lodging Units
1	Industrial	146.6	3,007,000	-	-
1A	Industrial	2.0	-	-	-
2	Urban Commercial	43.7	650,000	-	200
3	Urban Commercial	25.3	480,000	-	400
4	Urban Residential	21.4	-	800	-
5	Urban Commercial (Existing)	2.7	13,000	-	-
Roadway Modifications		16.0	-	-	-
Total		257.7	4,150,000	800	600

Source: Conceptual Land Use Plan for the Meredith International Centre (T&B Planning) April 2014

<sup>1</sup> From Table 2.5-1 of Chapter 2.0 of Meredith International Centre's Initial Study.

### 1.3 Proposed Project Relation to 2010 Urban Water Management Plan

#### Law

10910. (c) (1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).

(3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

The City's General Plan, referred to as "The Ontario Plan" (TOP), adopted January 27, 2010 was utilized to determine the ultimate City of Ontario water demand. The City of Ontario's 2010 Urban Water Management Plan projected water deliveries for 2015; 2020; 2025; 2030; and 2035 were based upon current land use projections.

The Policy Plan (General Plan) component of The Ontario Plan (TOP) currently designates the Project site as "Mixed Use". TOP envisions a high density mixture of commercial, office, and residential uses based around a transit station. Specifically, TOP allows up to 7.5 million square feet of commercial/office/retail uses and up to 2,958 residential units (at a density of 40 dwelling units per acre) to be developed on the site. The area fronting Interstate 10 is envisioned as an intensive mixture of mid-rise buildings, regional-serving retail and office centers. The northern area is designated for a residential village comprised of single and multi-family residential districts surrounding a vertically mixed-use village core.

The projected water demand for the “Mixed Use” plan (as defined in TOP) for the project site was considered in the City’s 2010 Urban Water Management Plan (UWMP) (Appendix A). Pursuant to Water Code Section 10910, Section C3 as amended by SB 610, “the water supply assessment for the project shall include a discussion with regard to whether the public water system’s total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.”

The projected water demand for the “Mixed Use” plan is 1458 acre-feet per year (Table 1-2) which is accounted for in City’s 2010 Urban Water Management Plan.

City of Ontario’s total annual water supply (Table 4-1 of the UWMP, Appendix A) is projected to be 86,301 acre-feet by the year 2035, while the projected annual deliveries will be 67,916 acre-feet in 2035 (Table 3-9 of the UWMP). In addition, the City of Ontario has additional water uses and losses totaling 18,385 acre-feet per year. Section 3 of this WSA provides a detailed discussion of City of Ontario’s projected water supply.

**Table 1-2: Projected Water Demand of the Meredith “Mixed Use Plan”  
Based Upon “The Ontario Plan”**

Meredith Project		Unit Water Use <sup>2</sup>	Daily Water Demand (gpd)
Residential Dwelling Population	5914 <sup>1</sup>	76 gpd/person	449,464
Jobs (non office)	1541	125 gpd/job	192,625
Jobs (office)	15,348	43 gpd/job	659,964
Total Annual Demand			1,302,053 gpd or 1458 Acre-Feet per Year

<sup>2</sup> From Pages 1-6 and 1-7 City of Ontario, Water Master Plan April 2012.

<sup>1</sup> From table 2-2 (Ultimate Study Area Land Uses) from City of Ontario 2010 Urban Water Management Plan.

The City of Ontario's City Council adopted the 2010 "Urban Water Management Plan" (Appendix A) by Resolution 2011-039 on June 21, 2011 (Appendix B). The Urban Water Management Plan is consistent with the City of Ontario's Water Master Plan (April 2012) (Appendix C).

The proposed Meredith International Centre project consists of 3 million square feet of industrial uses, 1.1 million square feet of commercial uses, and up to 800 residential units (Table 1-1). The proposed Meredith International Centre is far less intense land use when compared to the Meredith "Mixed Use Plan" development considered in the 2010 Urban Water Management Plan.

The projected water demand associated with the Meredith International Centre is 741 acre-feet per year (Table 1-3) out of the City of Ontario's total projected water deliveries (2035), of 67,916 acre-feet per year, was accounted for in the above referenced Urban Water Management Plan which is incorporated into this Water Supply Assessment. The Meredith International Centre Water Demand is about 50 percent of the water demand of the "Mixed Use Plan" for the project site that was incorporated into the 2010 Urban Water Management Plan.

#### **1.4 Methodologies of Analysis**

The projected potable water demands published in the 2010 Urban Water Management Plan were determined based upon the existing demands, the land use planning adopted by the City (The Ontario Plan), and the unit demand factors developed for future

development. Demands were calculated as described in the 2010 Urban Water Management Plan (Appendix A).

The projected water demand for the Meredith International Centre property, was evaluated in the 2010 Urban Water Management Plan, is calculated to generate a projected water demand at full development of 741 acre-feet per year. This projected water demand, 741 acre-feet per year, is about half of what was incorporated in the 2010 Urban Water Management Plan for the project site.

**Table 1-3: Meredith International Centre Water Demand<sup>1</sup>  
Based Upon Table 2.5-1 “Meredith International Centre SPA Proposed Land Uses”**

Planning Area	Land Use	Acreage	Unit Water Demand <sup>2</sup>	Water Demand (gpd)
1	Industrial	146.6	2,000 gpd/ac	293,200
1A	Industrial	2	2,000 gpd/ac	4,000
2	Urban Commercial	43.7	2,200 gpd/ac	91,400
	Overnight Lodging 200 Lodging units		150 gpd/Room	60,000
3	Urban Commercial	25.3	2,200 gpd/ac	55,660
	Overnight Lodging 400 Lodging Units		150 gpd/Room	60,000
4	Urban Residential (800 Units)	21.4	152 gpd/du	121,600
5	Urban Commercial (Existing)	2.7	2,200 gpd/ac	5,940
Roadway Modifications		16.0	-	-
TOTAL		257.7		
WATER DEMAND				661,800 gpd or 741 Acre-Feet per Year

<sup>1</sup> From Table 2.5-1 (Page 2-6) Meredith International Centre SPA/Initial Study project description

<sup>2</sup> From Table 4-8 City of Ontario Water Master Plan – April 2012

## SECTION 2 - WATER DEMAND ANALYSIS

The purpose of this section is to evaluate whether the proposed project was considered in the water supplier's planning for water demand. This section will:

- 1) identify the various water use sectors, 2) identify water demand by those sectors for the next twenty years, and 3) project the Meredith International Centre water demand and determine the water demand for the subject area that was included in Ontario Municipal Utilities Company *2010 Urban Water Management Plan*.

### 2.1 Location

The City of Ontario is a rapidly growing community located in the foothills of the San Gabriel Mountains in the western portion of San Bernardino County. The City is bounded by the City of Montclair on the northwest (Figure 2-1) the cities of Rancho Cucamonga and Upland on the north, the City of Fontana on the northeast, Jurupa Community Services District on the south and southeast, and the City of Chino on the south and southwest. In 1999, Ontario's southern boundaries were extended in order to annex 8,200 acres of unincorporated Agricultural Preserve. The City boundaries, prior to this annexation, are referred to as Old Model Colony (OMC) and encompass about 24,046<sup>1</sup> acres. The annexed area, which is referred to as the New Model Colony (NMC), consists of dairies and agricultural land uses.

---

<sup>1</sup> The Ontario Plan Draft EIR



Including the NMC, the City boundaries now represent approximately 31,958<sup>1</sup> acres or approximately 50 square miles. Three (3) major freeways (Interstate 10, Interstate 15 and State Route 60) traversing the City of Ontario serve as major transportation hubs for freeway commuters as well as industrial businesses. A major railway corridor also crosses the City's northerly sector. The City of Ontario is also home to the Ontario International Airport.

## 2.2 Pressure Zones

The City is situated in the foothills of the San Gabriel Mountains but on relatively flat terrain with elevations ranging from about 635 feet above mean sea level (msl) at its southerly boundary to about 1180 feet above msl at its northerly boundary. Currently, the City's domestic water system is divided into five pressure zones as follows: 925 Zone, 1010 Zone, 1074 Zone, 1212 Zone, and 1348 Zone. It should be noted that the 925 Zone does not currently have any existing demands. The 925 Zone will serve the future New Model Colony developments. The largest pressure zone in the system is the 1212 Zone, which covers about 38 percent of the existing water service area. Details of each pressure zone are shown in Table 2-1. The general boundaries and the service elevation ranges for the pressure zones are indicated in Table 2-1 and Figure 2-2. Each zone has its own storage that provides not only control of maximum pressures but also

---

<sup>1</sup> The Ontario Plan Draft EIR

satisfies minimum required pressures. Table 2-1 also provides a breakdown of acreage by pressure zone. The Meredith International Centre is within the 1212 Pressure Zone.

**Table 2-1  
City of Ontario Pressure Zones**

Pressure Zone Name <sup>1</sup>	Pressure Zone Name <sup>2</sup>	Area (sq. mi.)	Area (AC)	Pipe Length (ft)	Hydraulic Grade Line (ft)	Ground Elevation Range (ft)	Static Pressure Range <sup>3</sup> (psi)
1348	13 <sup>th</sup> Street	3.1	1,954	370,591	1,348	1,020-1,180	73-142
1212	8 <sup>th</sup> Street	18.7	11,957	1,285,311	1,212	865-1,095	51-150
1074	4 <sup>th</sup> Street	7.5	4,780	596,218	1,074	825-930	62-108
1010	Phillips Street	9.0	5,783	615,906	1,010	735-880	56-119
925 <sup>4</sup>	Francis Street	10.5	6,733	15,341	925	635-800	54-126
	<b>Total</b>	<b>48.8</b>	<b>31,206</b>	<b>2,883,366</b>			

<sup>1</sup>Nomenclature used in this report.

<sup>2</sup>Nomenclature used in previous Water Master Plan.

<sup>3</sup>Calculated based on HGL and ground elevation range.

<sup>4</sup>There is no existing demands in the 925 Zone. The water entering Reservoir 925-2A is pumped out to the 1212 Zone. Brookfield Homes and Colony High School are currently connected to the 1010 Zone.

## 2.3 Land Use

The following discussion of Land Use is from the City of Ontario's 2010 Urban Water Management Plan (Appendix A).

### Existing Land Use

The City is a well planned urban community with a balance of residential, commercial, and industrial land uses. Within the service area, the primary land use in the City is residential (8,762 ac or 28.0%). Industrial use also makes up a significant portion of the total existing land use (4,671 ac or 14.9%). Approximately 3,290 acres or 10.5% of the total is currently undeveloped. Table 2-2<sup>1</sup> provides a summary of the existing land uses. The existing land uses within the City are shown on Figure 2-2<sup>2</sup>.

---

<sup>1</sup> Table 2-1 of the 2010 Urban Water Management Plan (Appendix A).

<sup>2</sup> Figure 2-4 of the 2010 Urban Water Management Plan (Appendix A).

**Table 2-2: City of Ontario  
Existing Land Uses**

Landuse Description		Service Area				Outside Service Area		Total City			
		OMC (Ac)	NMC (Ac)	Total (Ac)	% of Total	OMC (Ac)	% of Total	OMC (Ac)	NMC (Ac)	Total (Ac)	% of Total
RR	Rural Residential	566		566	1.8			566		566	1.8
SFR	Single Family Residential	4,489	2,585	7,074	22.6	115	18.8	4,604	2,585	7,189	22.5
MFR	Multiple Family Residential	1,099	23	1,122	3.6	44	7.2	1,143	23	1,166	3.6
<b>Total Residential</b>		<b>6,154</b>	<b>2,608</b>	<b>8,762</b>	<b>28.0</b>	<b>159</b>	<b>26.0</b>	<b>6,313</b>	<b>2,608</b>	<b>8,921</b>	<b>27.9</b>
COM	Commercial	1,745	76	1,821	5.8	14	2.3	1,759	76	1,835	5.7
IND	Industrial	4,606	65	4,671	14.9	227	37.0	4,833	65	4,898	15.3
OPEN	Open Space	725	9	734	2.3			725	9	734	2.3
PUBLIC	Public	326	15	341	1.1			326	15	341	1.1
SCHL	Schools	419	38	457	1.5			419	38	457	1.4
ARPT	Airport	1,500		1,500	4.8			1,500		1,500	4.7
LF	Landfill	209		209	0.7			209		209	0.7
AGR	Agricultural	206	2,733	2,939	9.4	20	3.2	226	2,733	2,959	9.3
INF	Infrastructure	869	85	954	3.0	35	5.7	904	85	989	3.1
ROW	Right-of-Ways	4,362	372	4,734	15.1			4,632	372	4,734	14.8
UND	Undeveloped	1,767	1,532	3,290	10.5	79	12.9	1,846	1,523	3,369	10.5
UNK	Unknown	77	658	735	2.3	70	11.4	147	658	805	2.5
VAC	Vacant Buildings	198		198	0.6	9	1.5	207		207	0.6
<b>Total Commercial, Industrial, &amp; other</b>		<b>17,009</b>	<b>4,053</b>	<b>22,583</b>		<b>454</b>		<b>17,733</b>	<b>5,574</b>	<b>23,037</b>	
<b>Total*</b>		<b>23,163</b>	<b>6,661</b>	<b>31,345</b>	<b>100.0</b>	<b>613</b>	<b>100.0</b>	<b>24,046</b>	<b>8,182</b>	<b>31,958</b>	<b>100.0</b>

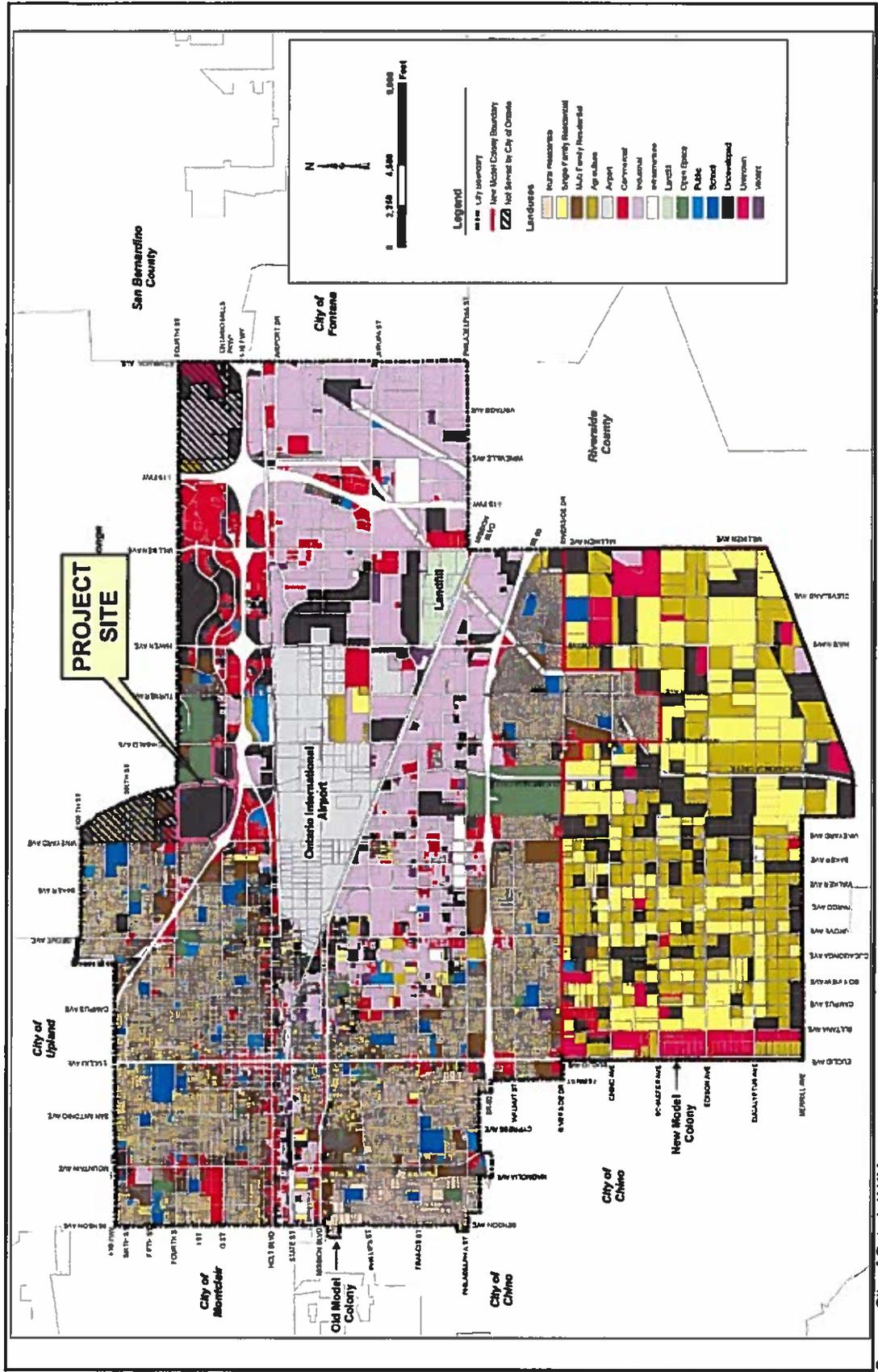
\*Due to rounding, sum of individual items may not equal total.

## Ultimate Land Use

The ultimate land uses are based upon the City's latest general plan document entitled The Ontario Plan (2010). Table 2-3<sup>3</sup> provides a summary of the ultimate land uses and shown on Figure 2-3<sup>4</sup> are the locations of these land uses. The industrial area increases to 6,747 acres from 4,898 acres (37.8 percent increase). The employment area, including business parks and industrial uses, is expected to cover about 8,103 acres (25.4 percent of total City area).

<sup>3</sup> From Table 2-1 of the 2010 Urban Water Management Plan (Appendix A).

<sup>4</sup> Figure 2-4 of the 2010 Urban Water Management Plan (Appendix A).



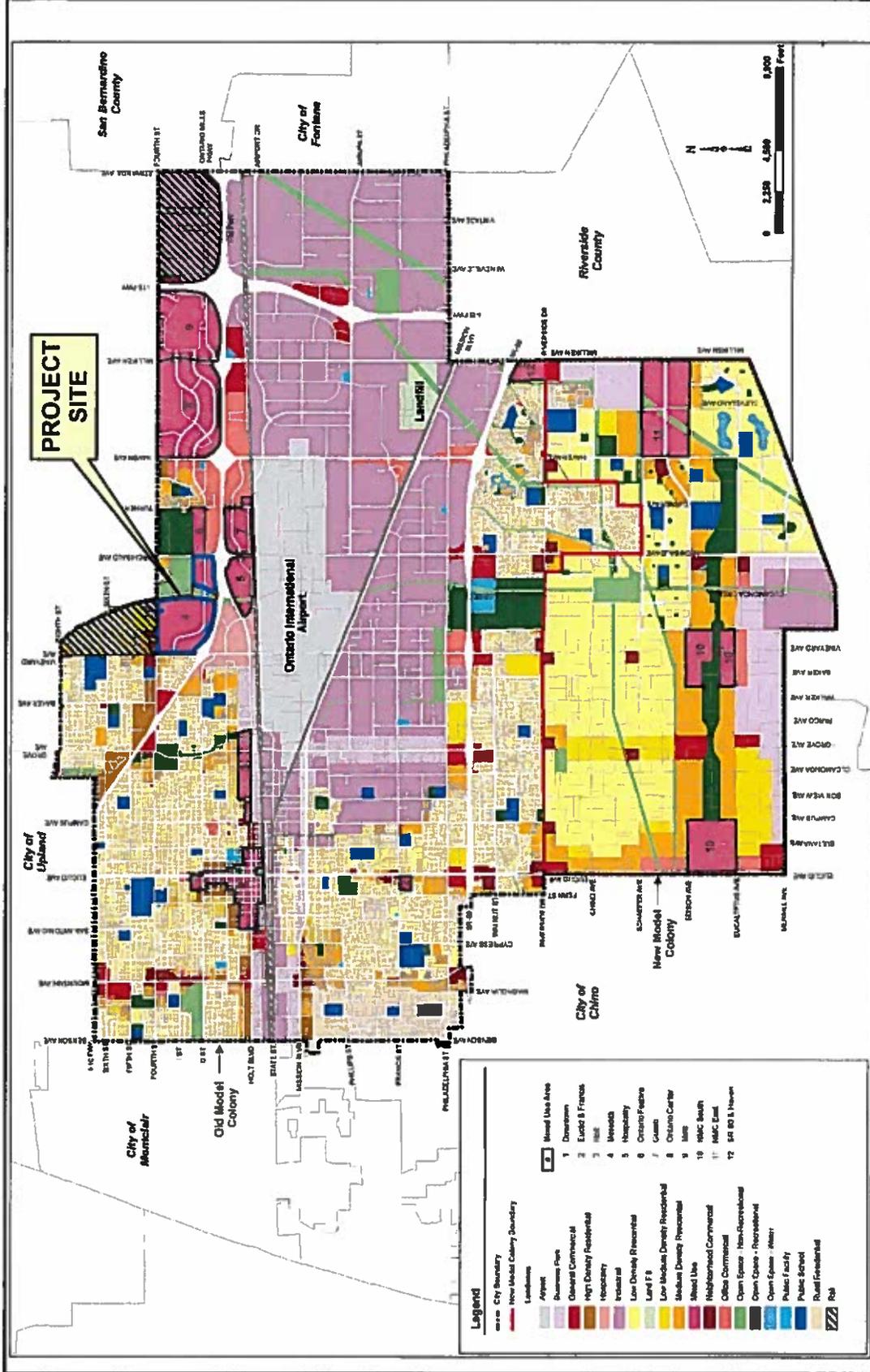
**Figure 2-2 – Existing Land Use Map**  
Meredith International Centre

Source: City of Ontario/AKM  
2010 Urban Water Management Plan

Table 2-3: City of Ontario Ultimate Study Area Land Uses

Land Use Category	Acres <sup>2</sup>	% of Total Area	Density (du/ac) <sup>3</sup>	Intensity (FAR) <sup>3</sup>	Units	Population <sup>4</sup>	Square Feet (Non-Office)	Square Feet (Office)	Total Square Feet	Jobs <sup>5</sup> (Non-Office)	Jobs <sup>6</sup> (Office)	Total Jobs <sup>6</sup>
<b>Residential</b>												
Rural Res	453	1.4	2.0		908	3,621						
LDR (OMC)	4,308	13.5	4.0		17,232	68,876						
LDR (NMC)	3,158	9.9	4.5		14,211	56,801						
LMDR (OMC)	285	0.9	8.5		2,508	10,026						
LMDR (NMC)	886	2.8	8.5		4,285	17,167						
MDR (OMC)	1,058	3.3	18.0		16,124	61,551						
MDR (NMC)	241	0.8	35.0		23,284	77,964						
<b>Subtotal</b>	<b>10,975</b>	<b>34.2</b>			<b>86,991</b>	<b>324,192</b>						
<b>Commercial</b>												
Downtown	109	0.3	35.0		2,279	4,557	758,202	758,202	1,516,403	543	2,183	2,706
East & Front St	10	0.0	30.0		158	312	181,216	0	181,216	418	0	418
Hotel	65	0.2	30.0		412	824	478,289	1,185,722	1,674,011	343	3,420	3,763
Mixed-Use	243	0.8	40.0		2,957	5,914	2,146,637	5,366,582	7,513,229	1,541	15,348	16,890
Hospitality	76	0.2	60.0		457	914	1,493,672	1,493,672	2,987,345	1,072	4,272	5,344
Ontario Festival (MoU in 14)	37	0.1	20.0		368	736	112,211	240,451	352,662	81	688	768
Garage	83	0.3	30.0		500	1,001	1,089,871	1,271,518	2,361,388	783	3,637	4,419
Ontario Center (E. of Haven)	345	1.1	40.0		4,138	8,278	1,502,384	7,511,922	9,014,306	1,079	21,484	22,563
Mills	240	0.7	40.0		3,315	6,630	3,912,233	1,564,893	5,477,126	2,809	4,476	7,285
NMC south	316	1.0	35.0		3,315	6,630	982,632	5,775,795	6,758,427	991	16,519	17,210
NMC east	264	0.8	25.0		1,878	3,956	1,376,413	1,208,111	2,584,524	890	3,448	4,439
SRRO & Harbour	41	0.1	0.0		0	0	349,112	373,305	682,417	251	898	1,147
<b>Subtotal</b>	<b>1,822</b>	<b>5.7</b>			<b>17,039</b>	<b>34,078</b>	<b>14,362,865</b>	<b>26,698,182</b>	<b>41,059,046</b>	<b>10,601</b>	<b>76,351</b>	<b>86,952</b>
<b>Employment</b>												
NC	277	0.9	0.30		2,898,914	724,228	2,898,914	724,228	3,821,143	6,992	2,071	8,783
CC	562	1.7	0.30		6,488,654	720,918	6,488,654	720,918	7,209,572	4,656	2,092	6,721
OC	526	1.6	0.75		5,751,408	12,019,948	5,751,408	12,019,948	17,771,352	3,689	34,377	38,076
MOS	143	0.5	1.00		5,849,475	1,282,369	5,849,475	1,282,369	6,311,844	3,628	3,610	7,236
<b>Subtotal</b>	<b>1,499</b>	<b>4.7</b>			<b>19,986,449</b>	<b>14,727,505</b>	<b>19,986,449</b>	<b>14,727,505</b>	<b>34,373,954</b>	<b>18,676</b>	<b>42,127</b>	<b>60,798</b>
<b>Other</b>												
BP	1,357	4.2	0.40		11,821,313	11,821,313	11,821,313	11,821,313	23,642,626	7,684	33,809	41,493
IND	6,747	21.1	0.55		145,489,382	16,183,265	145,489,382	16,183,265	161,632,647	94,555	48,227	140,782
<b>Subtotal</b>	<b>8,103</b>	<b>25.4</b>			<b>157,290,695</b>	<b>27,984,578</b>	<b>157,290,695</b>	<b>27,984,578</b>	<b>185,275,273</b>	<b>102,239</b>	<b>80,036</b>	<b>182,275</b>
<b>Total</b>	<b>31,958</b>	<b>100.0</b>			<b>104,030</b>	<b>358,270</b>	<b>191,240,009</b>	<b>69,408,264</b>	<b>260,648,273</b>	<b>131,515</b>	<b>198,508</b>	<b>330,023</b>

Notes:  
 1. Historically, citywide buildout levels do not achieve the maximum allowable density/intensity on every parcel and run, on average, lower than allowed by the General Plan. Accordingly, the buildout assumption in this General Plan do not assume buildout at the maximum density or intensity and instead are adjusted downward to account for variations in buildout intensity. Buildout assumptions are as agreed upon on 2-4-08.  
 2. Acres are given as adjusted gross acreages, which do not include the right-of-way for roadways, flood control facilities, or railroads.  
 3. Density/intensity includes both residential density, expressed as units per acre, and non-residential intensity, expressed as floor area ratio (FAR), which is the amount of building square feet in relation to the size of the lot.  
 4. Estimates of population by residential designation are based on a persons-per-household factor that varies by housing type: 3.147 pph for MF, 3.278 pph for SF, and 3.697 pph for RD.  
 5. The factors used to generate the number of employees are: 2.310 for 1000 sq ft of community commercial; 7.18 for 1000 sq ft of industrial; 650 of 1000 sq ft of industrial; and 2.88 of 1000 sq ft of office.



Source: City of Ontario/AKM  
2010 Urban Water Management Plan

Figure 2-3 – Ultimate Land Use Map  
Meredith International Centre

### **Residential Land Uses**

The Ontario Plan defines five residential land use categories: Rural, Low Density, Low-Medium Density, Medium Density, and High Density. The densities for each of the residential land use categories are provided in Table 2-3.

### **Retail/Service**

Four retail/service uses are defined: Neighborhood Commercial, General Commercial, Office Commercial, and Hospitality. The intensities (floor area ratios) for each commercial use are shown in Table 2-3.

### **Employment**

The Ontario Plan has two employment uses: Business Park and Industrial. The intensities for each employment type commercial use are shown in Table 2-3.

**Open Space**

Open Space land use designations include Non-Recreational Open Space, Recreational Open Space and Water Open Space (i.e. lakes, ponds, etc.)

**Public**

Public land use designations include Public Facility and Public School.

**Other**

Other land use designations include the Ontario International Airport, Landfill, Railroad and Roadway.

**2.4 Forecast of Ultimate Water Demand**

The total recorded and projected water demand through year 2035 is presented in Section 3 of Appendix A. The projected total water delivery in the year 2035 is 67,916 acre-feet.

To comply with Section 10910, subdivision (d), (e), (f), and (g), we have incorporated by reference, the requested information in the adopted 2010 Urban Water Management Plan which is bound herein (Appendix A).

## 2.5 Water Use Sectors

Water Use Sectors play the largest role in determining water supply within a given water service area. Examples of water use sectors are: residential, commercial, industrial, institutional and governmental, and landscape. City of Ontario's service area is comprised of all of these water use sectors. City of Ontario does not usually supply potable water for agricultural purposes, as these uses typically rely upon private wells. As development in the southern portion of City of Ontario continues, agricultural uses are being replaced by residential, commercial and industrial developments. City of Ontario is responsible for providing potable water to these emerging developments. The summary of future domestic water use factors are provided in Table 2-4.

**Table 2-4: \*\***  
**City of Ontario Future Domestic Water Unit Demand Factors**

Landuse		Density (du/ac)	Density (people/ du)	Unit Demand Factor (gpd/ person or gpd/job)	Unit Demand Factor (gpd/ac)	Unit Demand Factor (gpd/du)
<b>Residential</b>						
Rural Residential	RR	0 - 2	4.0	140	1,120	560
Low Density Residential	LDR	2 - 5	4.0	136	2,450	544
Low Medium Density Residential	LMDR	5 - 11	4.0	116	3,940	464
Medium Density Residential (OMC)	MDR	11 - 25	3.8	98	6,730	372
Medium Density Residential (NMC)	MDR	11 - 25	3.3	98	7,220	323
High Density Residential (OMC)	HDR	25 - 45	3.3	76	8,900	251
High Density Residential (NMC)	HDR	25 - 45	2.0	76	5,320	152
<b>Commercial</b>						
Business Park	BP	-	-	43	2,200	-
General Commercial	GC	-	-	180	2,200	-
Hospitality <sup>1</sup>	HOS	-	-	-	5,000	-
Neighborhood Commercial	NC	-	-	70	2,200	-
Office Commercial	OC	-	-	43	3,400	-
<b>Industrial</b>						
Industrial	IND	-	-	95	2,000	-
<b>Mixed Use</b>						
Mixed Use <sup>2</sup>	MU	-	-	Factors for residential, see above 43 for office 125 for non-office	N/A	-
<b>Open Space</b>						
Open Space Non-Recreational	OS-NR	-	-	-	1,000	-
Open Space Recreational	OS-R	-	-	-	1,000	-
<b>Public</b>						
Public Facility	PF	-	-	-	2,200	-
Public School <sup>3</sup>	PS	-	-	-	3,500	-

<sup>1</sup> If possible it is recommended to use 150 gpd/room on a case by case basis. It is difficult to estimate the number of rooms or square footage per acre.

<sup>2</sup> Mixed Use demands should be based on the types of landuse that make up the specific area and the unit demand factors provided above. The City's 2010 General Plan (The Ontario Plan) provides detailed information on the landuses that make up each mixed use area (See Table 3-2 of Appendix C).

<sup>3</sup> The unit demand factor 3,500 gpd/ac include an allowance for irrigation. If irrigation will be supplied by recycled water, a factor of 1,800 gpd/ac is recommended. This reduced factor was used in the hydraulic model for NMC schools.

\*\*From Table 4-8 of City of Ontario's Water Master Plan by AKM Consulting Engineers, April 2012 (Appendix C).

## **Landscape**

Landscape customer demand is expected to increase due to continued growth in visitor-serving facilities, proposed golf courses, and proposed neighborhood parks associated with additional residential development in the New Model Colony. Increased efficiency and landscape conversions at existing parks, golf courses, should help offset new demand resulting from projected increases in this Water Use Sector. The City is planning that the future water demand of this sector will be supplied from either reclaimed/recycled or non-potable groundwater sources, hence, avoiding the use of potable water. Shown in Table 4-1 of the 2010 Urban Water Management Plan (Appendix A) is the projected growth of the use of recycled water from 1,976 to 18,385 acre-feet between 2010 and 2035 respectively.

The number of past, current and future water connections for each Water Use Sector of the City of Ontario is shown in Tables 3-1 through 3-6 of the 2010 Urban Water Management Plan (Appendix A).

## **2.6 Project Water Demand**

The projected water demand for the Meredith “Mixed Use Plan”<sup>5</sup> was incorporated in the 2010 UWMP. Shown on Table 1-2 is the projected water demand which was 1458 acre-feet per year. The “Meredith International Centre” Land Use Plan which is discussed in Chapter 1, will replace the Meredith “Mixed Use Plan” that

---

<sup>5</sup> See Figure 2-4 “Ultimate Land Use map 2-4 of 2010 Urban Water Management Plan.

was incorporated in the 2010 Urban Water Management Plan. The projected water demand of the Meredith International Centre is 741 acre-feet per year (Table 1-3) which is about 50 percent of the “Meredith Mixed Use” plan.

### **SECTION 3 - WATER SUPPLY ANALYSIS**

This section identifies the various sources of potable water utilized and available to the City of Ontario. The purpose of this section is to evaluate the water sources, or supplies, that will be utilized by the proposed project during normal, single-dry, and multiple-dry water years during a 20-year projection.

#### **Law**

10910. (d) (1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.

(2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

### 3.1. Current and Recorded Water Supply Sources

The proposed project represents about 0.08%<sup>1</sup> (741 acre-feet per year divided by 86,301 acre-feet per year) of Ontario's water demand based upon its projected water supply in 2035. The City of Ontario has four sources of supply: groundwater from the Chino Basin; treated groundwater from the Chino Desalter Authority (CDA); recycled water from the Inland Empire Utilities Agency (IEUA); and imported water from the Water Facilities Authority (WFA).

Ontario's potable water supplies come from two major sources (2013): local groundwater (69%) and imported surface water (31%). By 2035 municipal water supply sources will consist predominantly of groundwater wells through direct use or treatment and use, and imported surface water from The Metropolitan Water District of Southern California (MWD) supplies. The reliability of MWD's water supplies is discussed in the Urban Water

---

<sup>1</sup> Please note the Meredith "Mixed Use Plan" that was incorporated in the Urban Water Management would have a projected water demand of 1458 acre-feet per year which would be almost double the water demand of the Meredith International Centre project.

Management Plan (Appendix A). Other sources are more institutional, meaning water that is supplied through water transfers, deals, and agreements. Table 5-1 of the City of Ontario's Master Water Plan (Appendix C) provides a description of the potable water sources utilized by Ontario, and the specific amount of water used from each source from 2000 through 2009.

In 2013, the City of Ontario's total water production was 39,861 acre-feet, of which 19,966.97, was produced from their local groundwater supplies and 4,987 acre-feet from CDA. The City received 10,967 acre-feet from its WFA source and 3,940 acre-feet of recycled water.

Ontario's projected water demand will be met using four water supply sources; imported water, local groundwater, treated groundwater (Chino Desalter Authority) and recycled water. (Table 4-1 of Appendix A).

The City of Ontario is a Member Agency of Inland Empire Utility Agency (IEUA). IEUA was formed to become a Member Agency of The Metropolitan Water District of Southern California for the purpose of importing water. IEUA stated in their Urban Water Management Plan (Page 11-1) the following:

*“The available supplies and water demands for IEUA’s service area were analyzed to assess the region’s ability to satisfy demands during three scenarios: a normal water year, single dry year, and multiple dry years. The tables in this section present the supply-demand balance for the various drought scenarios for the twenty-five year planning period 2010-2035. It is expected that the region will be able to meet 100 percent of its dry year demand under every scenario. The following Table 11-1 presents the supply reliability, as percentages of normal water year supplies, for the IEUA service area during normal, single dry, and multiple dry water years.*

**Table 11-1**

**Supply Reliability as Percentage of Normal Water Year Supply**

	Normal Water Year	Single Dry Water Year	Multiple Dry Water Years <sup>(2)(3)</sup>		
			Year 1	Year 2	Year 3
<b>Groundwater</b>	100%	115%	116%	115%	114%
<b>Recycled Water</b>	100%	100%	100%	105%	110%
<b>Surface Water<sup>(1)</sup></b>	100%	31%	49%	84%	77%
<b>Imported Water</b>	100%	62%	60%	61%	62%

**Notes:**

<sup>(1)</sup>Estimated decrease in surface water availability per Prado region 1970-2003 rainfall data. Surface water does not constitute a significant portion of the water supply.

<sup>(2)</sup>Chino Basin Dry-Year Yield (DYY) Program facilities provide for 100,000 AF of storage and 33,000 AFY of additional groundwater production for use in-lieu of Imported Water during dry years. The DYY Program is in effect during dry years between 2008 and 2023. Percentages reflect decrease in imported water and associated increase in groundwater production. From MWD’s 2010 UWMP. Metropolitan has documented the capability to reliably meet 100 percent of projected supplemental water demands through 2035.

<sup>(3)</sup>MWD’s 2010 UWMP, provides information for three consecutive dry years.”

The California Department of Water Resources issued *“The Water Project, Draft Delivery Reliability Report 2013”* in December 2013. DWR concluded *“Under future conditions, the average annual delivery of Table A water estimated for this 2013 Report is 2,400 taf/year, about 1% less than the 2,465 taf/year estimate for the future conditions scenario presented in the 2011 Report.”*

The Department of Water Resources provides State Water Project water to its contractors. The Metropolitan Water District is one of the 29 contracting agencies of the State Water Project (SWP). In turn, MWD delivers SWP water to its member agencies, one of which is IEUA. The specific extent of the impact of the projected reduction of MWD water to IEUA, as a result of DWR 2013 study is unknown at this time. However based upon the available information the impact upon the City of Ontario’s future water supply appears to be minimal because of their existing groundwater pumping capability.

### **3.2. Description of All Water Supply Projects**

#### **Dry Year Yield Project:**

The Dry Year Yield (DYY) Storage Program is a cooperative conjunctive use program involving MWD, IEUA, CBWM, Three Valleys Municipal Water District (TVMWD) and Chino Basin groundwater producers. Under the DYY

Program, MWD is allowed to store up to 100,000 AFY of water in the Chino Basin when surplus water is available during wet years and to produce 33,000 AFY in dry, drought, or emergency periods.

The City of Ontario authorized execution of an agreement with IEUA to participate in the DYY program in 2003 (Appendix E). Participation obligates the City to reduce its use of imported water compared to the previous year by a fixed amount, known as the “shift obligation”. The City’s shift obligation is 8,076 AFY. During years when MWD calls for extraction, the City’s WFA production would be reduced by 8,076 AFY compared to the previous year and it would extract this amount of the designated DYY wells. Because Jurupa Community Services District (JCSD) does not have an imported water connection, it has entered into an agreement with the City of Ontario for meeting its shift obligation. Under this agreement, JCSD conveys groundwater to the City in an amount equal to its shift obligation. During 2008 through 2010, JCSD pumped 5,042 acre-feet for the City of Ontario for JCSD’s shift obligation.

DYY funds were recently used for the construction of three groundwater wells (Wells 45, 46, and 47) and an ion-exchange facility located at John Galvin Park to treat water extracted from Well 44 and Well 52. When MWD calls for stored water delivery, the City will operate these facilities to meet its shift obligation. MWD will pay for the cost of operations and the City would

pay MWD (through IEUA) the full service water rate. The City can use the DYY facilities to meet its normal water demands during other periods but is responsible for the O&M costs.

This program allows the City to be less reliant upon imported water supplies. The additional groundwater capacity allows the City to increase the percentage supply used to meet peak demands.

**Water Facilities Authority:**

The City of Ontario is a member of the Water Facilities Authority (WFA) that was created under the Joint Exercise of Powers Agreement (JPA) in 1985 (Appendix F). The other members are the Monte Vista Water District and the Cities of Chino, Chino Hills, and Upland. The WFA's charter is to provide for the acquisition and construction of water supply facilities for its member agencies. The WFA purchases imported water from IEUA as a member agency of MWD. The City of Ontario has capacity rights up to 25.4 mgd or 28,500 AFY. Since 1995, the City has purchased an average of 11,304 AFY from WFA with a maximum of 15,772 AFY in 2004 and a low of 4,194 AFY in 2009. The rated capacity of the WFA treatment plant is 81 mgd (Appendix G). Per Ordinance No. 99-07-02, "Ordinance of the Water Facilities Authority – JPA: Repealing Ordinance 96-09-01", (Appendix H), notes that the City of Ontario has 31.4% of the design capacity of the treatment plant. The future reliability and vulnerability of MWD's supplies in

addition to groundwater supplies is discussed in the "2010 Urban Water Management Plan" (Appendix A).

**Chino Basin Desalting Authority:**

The City of Ontario is a member of the Chino Basin Desalter Authority (CDA), a joint exercise of powers agency created on September 25, 2001, along with Jurupa Community Services District, SARWC, IEUA and the Cities of Chino, Chino Hills, and Norco. Western Municipal Water District joined CDA in 2010. CDA's goals include:

- Achieve hydraulic control of the Chino Basin to prevent contaminated Chino Basin groundwater from entering Santa Ana River.
- Remove contamination (primarily nitrates, as well as TCE, PCE, and TCP) from groundwater in the southern portion of the Basin.
- Deliver the treated water to member agencies to offset the need for imported water.

As part of the Optimum Basin Management Plan for Chino Basin, the member agencies decided to extract and treat approximately 40,000 AFY of

groundwater from the southern portion of the Basin, treat it to potable water standards, and deliver it to the member agencies.

Chino Basin Desalter Authority currently owns and operates two desalters that pump and treat approximately 28,000 acre-feet of groundwater per year. The Chino I Desalter, located at 6905 Kimball Avenue in Chino, was completed in 2000 by the Santa Ana Watershed Project Authority (SAWPA) as the first phase of groundwater management project. CDA took over Chino I Desalter from SAWPA in 2002, and expanded it to its current rated capacity of 14.2 mgd in August 2005. The Chino I Desalter cannot provide this rated capacity due to the high total dissolved solids in the raw water supply. The Chino II Desalter is located at 11202 Harrel Street in the City of Jurupa Valley. It was completed in 2006 as the Phase 2 Project. Its current rated capacity is 10 mgd (permitted capacity is 15 mgd), including 5 mgd raw water bypass. The plant has not achieved the permitted capacity as a result of insufficient raw water supply.

The Phase 3 project will increase the Chino II Desalter capacity to 22.7 mgd. Although Chino Desalter I capacity will not be increased, additional raw water capacity will be provided by six new wells in the Chino Creek Well Field, which will achieve the hydraulic control of the Basin.

Treated water is sold to CDA members through “take or pay” contracts. Chino I and Chino II Desalters ancillary facilities include groundwater extraction wells, pumps and pipelines that extract and pump water to the desalter for pretreatment, filtration, air stripping of volatile organic compounds, ion exchange for nitrate removal, reverse osmosis for salt removal, and disinfection. The final product is a high quality drinking water, which is transported to member agencies through pipelines, pumps and reservoirs.

The City of Ontario has 1,500 AFY capacity rights in the Chino I Desalter. It is transmitted to the City's 1010 Zone near the intersection of Archibald Avenue and the extension of Schaeffer Avenue. In addition, the City has 3,500 AFY capacity from the Chino II Desalter, which is delivered to the 1010 Zone and 925 Zone near the intersection of Philadelphia Street and Milliken Avenue. When the Phase 3 Project is completed, the City's capacity will increase to 8,533 AFY. In the future, supply from CDA-1 will remain at 1,500 AFY, and supply from CDA-2 will increase to 7,033 AFY following the expansion of Chino II Desalter.

**City Well Production:**

The City currently (2014) owns and operates 27 wells, 24 of which are active. Three wells (9, 11, and 15) are currently inactive. In addition to the nine (9) new wells proposed in the City's 2010 Water Master Plan, the City has also prepared a long range replacement plan for older wells that lose production and for wells that may have water quality concerns in the future. Replacement wells are expected to have higher flow capacities than the well they are replacing. The City of Ontario has pumped an average of 25,001 AFY during the past ten years (2004-2013), with a high of 28,996 acre-feet in 2009, and a low of 19,967 acre-feet in 2013. The City's existing well capacity is 50,333 gpm.

**Recycled Water:**

The City of Ontario has been using recycled water produced by IEUA since 1972. Recycled water was first used at the Whispering Lakes Golf Course and Westwind Park.

IEUA began its planning for a regional recycled water production and delivery program in the early 1990's, and completed the IEUA Regional Recycled Water Program Feasibility Study in January 2002. This study formulated facilities to deliver over 70,000 AFY of recycled water to customers in its service area, and for groundwater recharge. IEUA then prepared a regional recycled water program implementation plan, which

prioritized the recommendations of the 2002 Regional Recycled Water Program Feasibility Study. Continuing with its efforts to maximize the use of this resource, IEUA completed the 2005 Recycled Water Implementation Plan, which proposed projects to deliver 93,000 AFY of recycled water produced at its four water recycling facilities.

IEUA developed its Recycled Water Three Year Business Plan in 2007 to provide a road map for expansion of its system. The plan is intended to be updated annually, and focuses on the following three years. The current plan anticipates providing 50,000 AFY by 2012, and 104,000 AFY by 2025. In 2009, IEUA produced about 65,000 acre-feet. Approximately half of the water used was within the service area (32,362 acre-feet), and the remainder was discharged to the Santa Ana River for reuse in Orange County.

The City of Ontario prepared a Recycled Water Master Plan in 2006 to efficiently incorporate recycled water into its supply portfolio. The 2006 Master Plan was fully coordinated with IEUA's recycled water planning efforts. The Recycled Water Master Plan was being updated in April 2012. The total potential recycled water demand is 26,645 AFY, consisting of 15,159 AFY in OMC, and 11,487 AFY in the NMC.

The existing recycled water delivery to the City is for irrigation and industrial purposes. The existing recycled water use (2013) in OMC was approximately 3940 AFY. The 2012 Recycled Water Master Plan determined that service can be extended to existing customers to replace 3,047 AFY of potable water use. Additionally, 1,944 AFY can be served to currently vacant 813 acres of mixed use, commercial, industrial, and airport land uses in OMC. It may be possible to further extend the use of recycled water in the OMC by 5,230 AFY for irrigation, commercial, industrial, and multi-family residential customers.

Based upon the City Urban Water Plan it was determined that the total Recycled Water Demand would not exceed 18,385 AFY in its service area consisting of 6898 AFY in OMC and 11,487 AFY in the NMC.

The future demand of 18,385 AFY includes the following: 17,340 AFY for common area irrigation in residential neighborhoods and commercial areas; 597 AFY in golf courses; and 448 AFY at the airport. Shown in Table 4-6 of the Urban Water Management Plan (Appendix A) is a list of the potential recycled water uses.

### 3.3. Comparison of Supply and Demand

Shown on Table 5-13 of the 2010 Urban Water Management Plan (Appendix A) is the “Supply and Demand Comparison-Normal Year” for the City of Ontario. Shown on Table 5-14 (2010 Urban Water Management Plan- Appendix A) is the “Supply and Demand Comparison- Single Dry Year” for the City. Shown on Table 5-25 (2010 Urban Water Management Plan- Appendix A) are the “Supply and Demand Comparison- Multiple Dry Year Events from 2015 through 2035” for the City.

As indicated previously, the Meredith International Centre water demand is estimated at 741 acre-feet per year, which was included in the supply and demand comparison tables referenced above.

Water Code Section 10910 C2 states “If the project water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).”

For the subject project, the water demand was accounted for in the 2010 Urban Water Management Plan (Appendix A).

Table 4-4 of the 2010 Urban Water Management Plan (Appendix A) projects the City of Ontario will increase its groundwater pumping from 20,373 to 39,383 acre-feet per year, from 2015 to 2035 respectively. This is an increase in groundwater production of 19,010 acre-feet per year between 2015 and 2035. Listed on Table 4-14 of the 2010 Urban Water Management Plan (Appendix A) are the City of Ontario Future Water Supply Projects. If you delete Chino II Desalter and Well 43 from the list, the City of Ontario's future groundwater production facilities total 32,256 acre-feet per year (Wells 42 through 58). If you deduct 19,010 acre-feet per year of the City of Ontario's future increase in groundwater production, between 2015 and 2035, from the future groundwater supply facilities (Table 4-14) 32,256 acre-feet per year, it results in the City of Ontario's having an excess groundwater production capacity of 13,246 acre-feet per year.

Shown on Table 5-13 (2010 Urban Water Management Plan- Appendix A) is the "Supply and Demand Comparison – Normal Year" from 2015 through 2035. The difference between supply and demand shown in Table 5-13 shows zero difference between demand and supply, but it does not reflect the City of Ontario potential excess groundwater production capacity reflected in Table 4-14 (Appendix A).

Shown on Table 5-14 is the “Supply and Demand Comparison- Single Dry Year” (Appendix A) from 2015 through 2035. The excess supply from 2015 through 2035 varies from 4,190 to 6,292 acre-feet per year. Shown on Table 5-25 “Supply and Demand Comparison – Multiple Dry Years” is the excess supply over demand from 2015 through 2035.

In conclusion the City of Ontario projected water supply available during normal, single dry and multiple dry water years during a 20 year projection will meet the projected water demand associated with the Meredith International Centre in addition to the City’s existing and planned future uses including agricultural and manufacturing use.

## SECTION 4 - GROUNDWATER ANALYSIS

### Law

10910. (f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment.

- (1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.
- (2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as over drafted or has projected that the basin will become over drafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system or the city or county if either is required to comply with this part pursuant to

subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.

- (3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water supply assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by

paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.

#### **4.1 Introduction**

Since the major source of potable water in the City of Ontario's service area is groundwater, SB 610 requires a groundwater analysis as part of the WSA. This section will include: 1) review of information contained in the urban water management plan relevant to the proposed project, 2) a description of the groundwater basin used to supply potable water to the proposed project and a review of the City of Ontario's legal right to pump from this basin, 3) historic (past 5 years) analysis of amount and location of groundwater pumped from the basin, 4) projected analysis of groundwater to be pumped from the basin, and 5) analysis of the sufficiency of the groundwater basin to meet the demands of the proposed project and the suppliers demands.

#### **4.2. Review of Urban Water Management Plan (Section 10910 (f)(1))**

The "2010 Urban Water Management Plan", prepared by AKM was adopted by the City of Ontario by Resolution 2010-039 on June 21, 2011 and is

attached as Appendix B and is incorporated by reference herein. The Plan includes information relevant to the identified water supply for the proposed project. This information includes: current and projected water supplies (*System Supplies*<sup>1</sup>) through Year 2035, a description of the Chino Groundwater Basin (*System Supplies*), the reliability of the water supply (*Water Supply Reliability & Water Shortage Contingency Planning*), historical, current and projected water use (*System Demands*), projected supply and demand comparisons (*Water Supply Reliability & Water Shortage Contingency Planning*), water demand management provisions (*Demand Management Measure*) and water shortage plans (*Water Supply Reliability & Water Shortage Contingency Plan*).

The Section of the UWMP entitled “*Water Supply Reliability and Water Shortage Contingency Planning*” includes tables identifying current supplies and projecting supply sources in five-year increments through the Year 2035. The conservative supply sources contemplated and included development projections through Year 2035, including a portion of the subject project in this WSA.

---

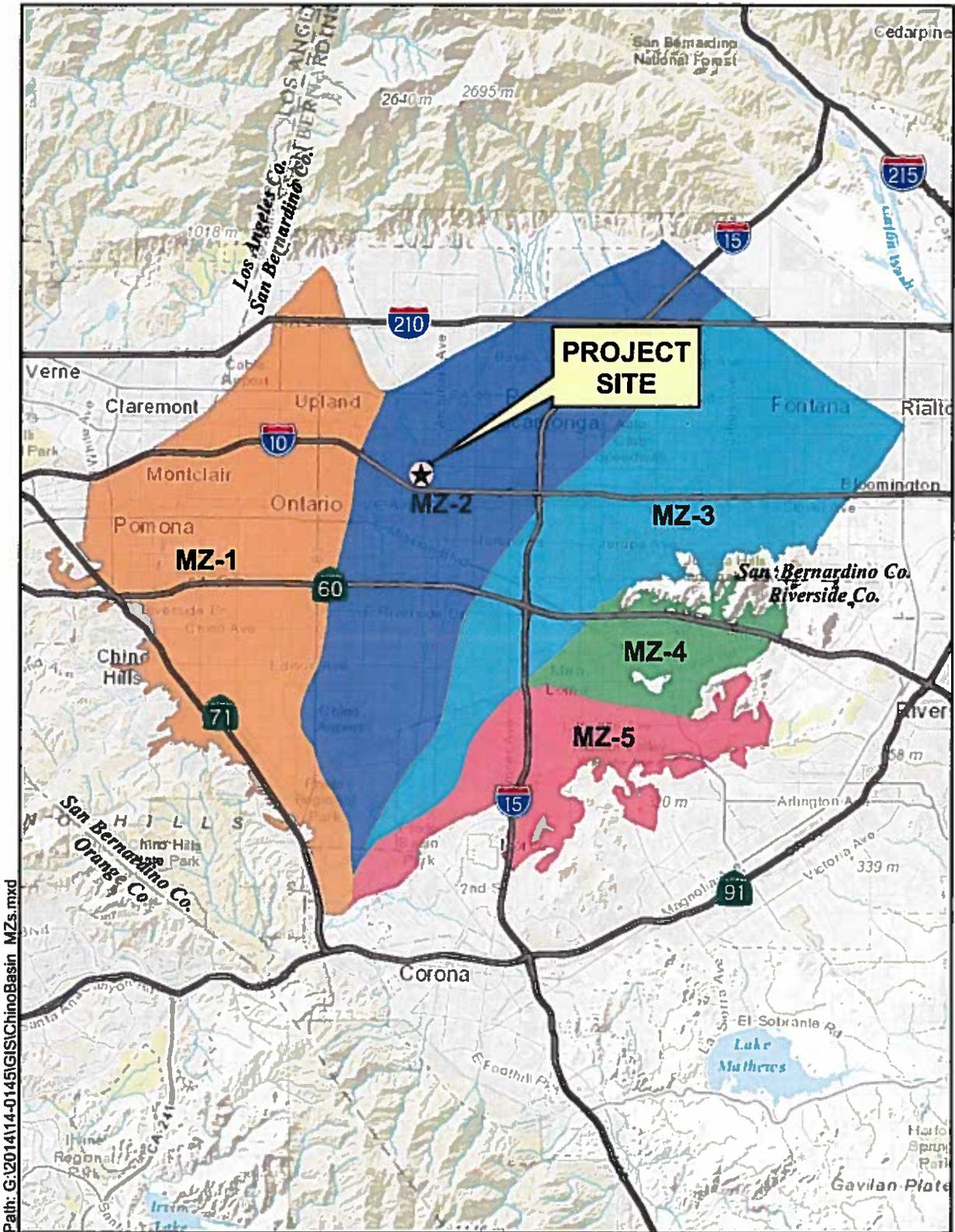
<sup>1</sup> Words and phrases italicized parenthetically are in reference to chapters so titled in the “2010 Urban Water Management Plan”.

### **4.3. Description of Chino Groundwater Basin and Legal Right to Pump (Section 10910 (f)(2))**

#### **A. Description of Chino Groundwater Basin**

The City of Ontario produces water from groundwater sources identified in this WSA located in the Chino Groundwater Basin ("the Basin"), which was adjudicated by the Superior Court of the State of California for the County of San Bernardino January 27, 1978 ("the Judgment"). A copy of the Judgment and Court-approved amendments thereto are attached as Appendix I.

Ontario's primary source for potable water comes from local groundwater sources located in the Chino Groundwater Basin (Basin). The Basin consists of approximately 235 square miles in the upper Santa Ana River Watershed that covers San Bernardino, Riverside and Orange Counties. While still considered a single basin for hydrologic purposes, the Basin is divided into five management zones (Figure 4-1), based on similar hydrologic conditions.



Path: G:\2014\14-0145\GIS\ChinoBasin\_MZs.mxd

Sources: SAWPA; Thomas Harder & Co.

**Figure 4-1 – Chino Basin Management Zones**  
Meredith International Centre



The Basin stores approximately five (5) million acre-feet of groundwater with the capability of storing additional one (1) million acre-feet. Geographically speaking, the City overlies the approximate center of the basin. Operation of the basin is governed by a 1978 court judgment and agreement among producers (Appendix I), whereby each is allotted a "base water right" to a certain percentage of the natural yield or "safe yield" of the basin. Under the judgment/agreement, entities (including the City of Ontario) can pump in excess of their allotted "base water right" but must pay a pump tax to cover the cost to replenish any overdraft caused by the excess pumping. The provisions of the judgment/agreement and the monitoring of the basin are carried out by a court appointed water-master. The watermaster files an annual report on pumping and replenishment.

## **B. Legal Right to Pump from the Chino Groundwater Basin**

The Judgment represents a plenary adjudication of all water rights in the Basin and is currently administered under the authority of the Chino Basin Watermaster with continuing jurisdiction by the Court. The principal function of an adjudication generally is to control the use of a water source in order to ensure the source is utilized in an optimum

manner. For purposes of an adjudication, the central feature is the determination of the safe yield of the Basin.

The safe yield of a groundwater basin has been defined as the amount of water that can be withdrawn annually without producing an undesirable result. Withdrawal in excess of safe yield is termed overdraft. The Judgment established the safe yield of the Basin in the amount of 140,000 acre-feet per year; however, Watermaster may determine that the operating safe yield can be higher from year-to-year depending on factors including favorable precipitation and management efforts that maximize the beneficial use of the groundwater Basin. These management efforts, which ensure the long-term sufficiency of groundwater from the Basin, including during dry years, are addressed in Subsection 5, which follows:

The Chino Basin Watermaster is required by the Judgment to periodically conduct a Safe Yield redetermination process. Since the time of the 1978 Judgment, the Safe Yield has been 140,000 acre-feet per year. Watermaster has been conducting the Safe Yield redetermination process for approximately one year. The process is expected to require several more months.

Watermaster has preliminarily indicated the Safe Yield may be determined to be less than 140,000 acre-feet/year in the future, however, impacts on Judgment parties' share of Safe Yield and Operating Safe Yield from year-to-year will depend on potential Basin management projects and programs that may enable future Safe Yield production to remain in the range of 130,000-140,000 acre-feet/year. Consequently, subject to certain localized physical limitations or impacts, any potential reduction in Safe Yield with or without augmenting basin management measures affects the cost of groundwater production rather than the reliability of groundwater supplies. The Judgment does not limit a party's groundwater production to its share of Safe Yield.

The Judgment allocates safe yield of the Basin according to the three pools as described in Paragraph 13 of the Judgment. The members of each pool are then enjoined from producing water from the Basin in excess of such allocated amount "except pursuant to the provisions of the Physical Solution" (Judgment, Paragraph 13(a)-(c)).

The Physical Solution of the Judgment is described in broad terms by Paragraphs 39 through 57 of the Judgment. Paragraph 45 provides Watermaster with the authority to levy and collect assessments for the purchase of water necessary to balance the production by any party in excess of that party's allocated share of safe yield of the Basin.

Paragraphs 49 and 50 then describe the sources of water which are authorized to function as sources of replenishment water and methods by which water can be replenished to the Basin. Exhibit H, Paragraph 7, of the Judgment (Appendix I) describes the way in which costs for replenishment water will spread among the members of the Appropriative Pool, which includes the City of Ontario.

The afore-cited paragraphs of the Judgment evince a clear expectation that parties, including the City of Ontario, would produce water in excess of their adjudicated production rights. The injunction in Paragraph 13 of the Judgment should thus be interpreted to mean that parties are enjoined from producing water in excess of their adjudicated rights except to the extent that they will pay a replenishment assessment upon production exceeding a specified amount.

The ability to produce water from the Basin is accordingly not a matter of availability, as contemplated and sanctioned by the Judgment for the reasons discussed above, but rather a matter of cost. Water produced in excess of production rights will cost more than water produced within a party's production rights. Thus, the quantity and reliability of groundwater supplies for purposes of this WSA is a matter of cost of the water produced from the Basin rather than limitations on production

which may otherwise operate to reduce the sufficiency of the groundwater supply.

The City of Ontario's Water Rights in the Chino Basin are discussed in Section 4 of Appendix A.

#### **4.4. Historic Use of Groundwater by the City of Ontario (Section 10910(f)(3))**

Ontario's groundwater supply comes from their twenty-four operational groundwater wells located throughout their service area. The City also has three inactive wells. The general location of these wells is shown on Figure 4-2 (Appendix C, Figure 1-2 of the City of Ontario's Water Master Plan, prepared by AKM April 2012). The amount of groundwater pumped by the City of Ontario between 2006 and 2010 from the Chino Groundwater Basin is listed in Table 4-3 of Appendix A.



#### 4.5. Projected Use of Groundwater by the City of Ontario (Section 10910(f)(4))

The proposed project will receive water from the City of Ontario's groundwater sources, WFA, CDA, and recycled water (Table 4-1 of Appendix A).

The City of Ontario's projected groundwater use is dependent upon the cost of extracting, treating and transporting the water to its customers. Groundwater from the Chino Groundwater Basin will be utilized by the City of Ontario either directly by pumping into its distribution system or by treating the groundwater (Wells 44 and 52) at the John Galvin Ion Exchange Plant and then pumping the treated groundwater into the City of Ontario's distribution system. The capacity of the City of Ontario's existing and future wells will be about 73,593 gpm<sup>2</sup> (105.97 mgd)<sup>2</sup> (118,691 acre-feet per year)<sup>3</sup>.

In addition to its well production, the City of Ontario will also utilize groundwater from the Chino Groundwater Basin from the Chino Desalter Authority's Chino Basin Desalters. As discussed previously, Ontario's contracted groundwater supply from the Chino Desalters, is 8,533 acre-feet/year.

---

<sup>2</sup> Table 9-3 of Appendix C.

<sup>3</sup> This assumes that the wells are operating on a 24 hour basis, seven days per week. Actual operation of wells is significantly less except for maximum water demand days.

The amount of water that the City of Ontario expects to withdraw from the Chino Basin via their well field or from the Chino Desalters is well within appropriate right pursuant to the Chino Basin Adjudication of 1978. Therefore, the projected supplies needed to meet future demands are easily met from the various sources discussed in this report.

#### **4.6. Sufficiency of Groundwater Basin (Section 10910 (f)(5))**

The City of Ontario's legal right to pump water in an amount necessary to meet all demands as sanctioned and protected by the Judgment as discussed above, is buttressed by a number of programs and projects directed to ensuring the sufficiency of groundwater supplies from the Basin, particularly during dry years. An adjudicated water right has perhaps the most substantial indicia of reliability of any water right that currently exists in California. An adjudicated right is based upon long-term studies whose purpose it is to protect the long-term functionality of the water source. These rights are coordinated in an established and binding manner with all the other users of the Basin and are overseen by Watermaster which has the authority to mandate and proscribe activities whose purpose is to protect the water source and maximize its long-term beneficial use.

Basin management activities include objectives, projects and programs identified in the Peace Agreement, entered into between Judgment parties

on June 29, 2000, which are more specifically described in the Optimum Basin Management Program (OBMP) that implements the provisions of the Peace Agreement. All Watermaster processes are governed by Rules and Regulations and receive active oversight from the Court which, as noted above, retains continuing jurisdiction over the administration of the Judgment. Consequently, the sufficiency of the groundwater is not only directed by rigorous Watermaster management processes, but validated and ensured by continuing Court oversight.

OBMP projects directed to ensuring the maximization of safe yield and operating safe yield of the Basin include: 1) a comprehensive monitoring program; 2) a comprehensive recharge program; 3) development and implementation of a water supply plan for impaired areas of the Basin; 4) development and implementation of a comprehensive groundwater management plan for Management Zone 1; 5) development and implementation of a regional supplemental water program; 6) development and implementation of cooperative programs with the California Regional Water Quality Control Board – Santa Ana Region and other agencies to improve Basin management; 7) development and implementation of a salt management program; 8) development and implementation of a groundwater storage program; and, 9) development and implementation of storage and recovery programs.

As stated, the referenced elements of the OBMP collectively comprise a comprehensive regimen directed to ensuring and maximizing the long-term beneficial use of water in the Basin. In particular, and specific to the location of current and future groundwater production facilities upon which Ontario relies or will rely to provide water to meet all demands within its service area, OBMP Program Element No. 3-“Develop and Implement Water Supply Plan for the Impaired Areas of the Basin” and Program Element No. 5-“Develop and Implement Regional Supplemental Water Program”, address the sufficiency of groundwater from the Basin.

Program Element Nos. 3 and 5 of the OBMP provides in part:

“AS URBANIZATION OF THE AGRICULTURAL AREAS OF SAN BERNARDINO AND RIVERSIDE COUNTIES IN THE SOUTHERN HALF OF THE BASIN OCCURS, THE AGRICULTURAL WATER DEMANDS WILL DECREASE AND URBAN WATER DEMANDS WILL INCREASE SIGNIFICANTLY. FUTURE DEVELOPMENT IN THESE AREAS IS EXPECTED TO BE A COMBINATION OF URBAN USES (RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL). THE CITIES OF CHINO, CHINO HILLS, AND ONTARIO, AND THE JURUPA COMMUNITY SERVICES DISTRICT (JCSD) ARE EXPECTED TO EXPERIENCE SIGNIFICANT NEW DEMAND AS THESE PURVEYORS BEGIN SERVING URBAN CUSTOMERS IN THE FORMER AGRICULTURAL AREAS. BASED ON CURRENT ESTIMATES OF OVERLYING AGRICULTURAL POOL PRODUCTION, IT IS EXPECTED THAT AT LEAST 40,000 ACRE-FT/YR OF GROUNDWATER WILL NEED TO BE PRODUCED (SIC) IN THE SOUTHERN PART OF THE BASIN TO MAINTAIN THE SAFE YIELD.

BASED ON THE DATA PRESENTED IN *OPTIMUM BASIN MANAGEMENT PROGRAM, PHASE I REPORT* (AUGUST 1999), MUNICIPAL AND INDUSTRIAL DEMANDS ARE PROJECTED TO INCREASE 30 PERCENT BETWEEN 2000 AND ULTIMATE BUILD OUT (ASSUMED TO BE 2020 IN THE PHASE I REPORT). SEVERAL AGENCIES WILL EXPERIENCE INCREASES IN DEMAND EXCEEDING 30 PERCENT, INCLUDING THE CITIES OF CHINO, CHINO HILLS, NORCO, ONTARIO, CUCAMONGA COUNTY WATER DISTRICT (CCWD), FONTANA WATER COMPANY (FWC), JCSD, AND THE WEST SAN BERNARDINO COUNTY WATER DISTRICT (WSBCWD). FORECASTS FROM MUNICIPAL AND INDUSTRIAL ENTITIES INDICATE THAT MUNICIPAL WATER SUPPLY SOURCES FOR THE CHINO BASIN AT BUILD OUT WILL CONSIST PREDOMINANTLY OF CHINO BASIN WELLS THROUGH DIRECT USE OR TREATMENT AND USE, GROUNDWATER AND TREATED SURFACE WATER FROM OTHER BASIN, AND MWDSC SUPPLIES. THERE IS APPROXIMATELY 48,000 ACRE-FT/YR OF AGRICULTURAL PRODUCTION IN THE SOUTHERN PART OF THE CHINO BASIN IN THE YEAR 2000, AND THIS PRODUCTION WILL REDUCE TO ABOUT 10,000 ACRE-FT/YR IN THE YEAR 2020 AT BUILD OUT. THIS DECLINE IN AGRICULTURAL PRODUCTION MUST BE MATCHED BY NEW PRODUCTION IN THE SOUTHERN PART OF THE BASIN OR THE SAFE YIELD IN THE BASIN WILL BE REDUCED.

CONSIDERABLE DISCUSSION OF THE ALTERNATIVE WATER SUPPLY PLANS OCCURRED AT THE OBMP WORKSHOPS. THE DISCUSSIONS FOCUSED, IN PART, ON THE ASSUMPTION AND DETAILS OF EACH ALTERNATIVE AND COST. BASED ON TECHNICAL, ENVIRONMENTAL, AND COST CONSIDERATIONS, THE STAKEHOLDERS SELECTED THE

WATER SUPPLY PLAN DESCRIBED IN TABLE 2. GROUNDWATER PRODUCTION FOR MUNICIPAL USE WILL BE INCREASED IN THE SOUTHERN PART OF THE BASIN TO: MEET THE EMERGING DEMAND FOR MUNICIPAL SUPPLIES IN THE CHINO BASIN, MAINTAIN SAFE YIELD, AND TO PROTECT WATER QUALITY IN THE SANTA ANA RIVER. A PRELIMINARY FACILITY PLAN (REVISED DRAFT WATER SUPPLY PLAN PHASE I DESALTING PROJECT FACILITIES REPORT) WAS PREPARED IN JUNE 2000, THAT DESCRIBES THE EXPANSION OF THE CHINO I DESALTER AND THE CONSTRUCTION OF THE CHINO II DESALTER TO BE BUILT IN THE JCSD SERVICE AREA (ATTACHMENT D).(UNDERLINING INCLUDED IN QUOTED TEXT). NEW SOUTHERN BASIN PRODUCTION FOR MUNICIPAL USE WILL REQUIRE DESALTING PRIOR TO USE. THE CITIES OF CHINO, CHINO HILLS, ONTARIO AND NORCO, AND THE JCSD WILL MAXIMIZE THEIR USE OF GROUNDWATER FROM THE SOUTHERN PART OF THE BASIN PRIOR TO USING OTHER SUPPLIES<sup>3</sup>.

IMPORTED WATER USE WILL INCREASE TO MEET EMERGING DEMANDS FOR MUNICIPAL AND INDUSTRIAL SUPPLIES IN THE CHINO BASIN AREA, WATERMASTER REPLENISHMENT, AND STORAGE AND RECOVERY PROGRAMS OR CONJUNCTIVE USE. EXPANDED USE OF IMPORTED WATER IN THE NORTHERN PART OF THE BASIN WILL HAVE A LOWER PRIORITY THAN MAINTAINING GROUNDWATER PRODUCTION IN THE SOUTHERN PART OF THE BASIN. RECYCLED WATER USE (DIRECT USE AND RECHARGE) WILL INCREASE TO MEET EMERGING DEMANDS FOR NON-POTABLE WATER AND

---

<sup>3</sup>*Detailed discussion continues in this paragraph concerning the production capacity of the desalters and construction/expansion projections.*

ARTIFICIAL RECHARGE. UNDER THE CURRENT BASIN PLAN, ALL NEW RECYCLED WATER USE WILL REQUIRE MITIGATION FOR TDS AND NITROGEN IMPACTS. RECYCLED WATER USE WILL BE EXPANDED AS SOON AS PRACTICAL. THE TWO NEW DESALTERS DESCRIBED ABOVE AND THE INCREASE IN STORM WATER RECHARGE WILL PROVIDE MITIGATION FOR THE EXPANDED USE OF RECYCLED WATER.”

As indicated in the foregoing quoted OBMP text, the City of Ontario overlies groundwater supplies in the southern part of the Basin which must be pumped for purposes of meeting new demands, maintain safe yield and to protect water quality in the Santa Ana River. As agricultural production in the southern part of the Basin declines, it will be necessary for these reasons to increase production for municipal uses. This will be achieved through the Chino I and Chino II Desalters, of which the City of Ontario has a contractual right to purchase 8,533 acre-ft/yr pursuant to the 2001 “Joint Exercise of Powers Agreement Creating the Chino Basin Desalter Authority” and subsequent agreements. Thus, not only was increased Basin water production by the City of Ontario foreseen in the OBMP, but actually sanctioned and encouraged for purposes of achieving OBMP objectives.

The sufficiency of the City of Ontario's groundwater supply is assured due to the abundance of groundwater which it overlies in the central and southern portion of the Basin, OBMP objectives that prioritize and assure production from the southern Basin, coupled with desalting and ion-exchange treatment

facilities that enable the use of this abundant supply for municipal (potable) purposes. As indicated in the quoted text of the OBMP, southern basin production, where the City of Ontario is partially located, is the linchpin of several critical OBMP objectives. Thus the sufficiency of groundwater is heightened and prioritized by the necessity of continued pumping from the southern Basin under the OBMP which is administered by the Watermaster and ultimately enforced by continuing Court jurisdiction over the Judgment.

The other referenced OBMP Program Elements are collectively directed to ensuring the sufficiency of Basin groundwater supplies, particularly during dry years, and comprehensively address water quality and quantity, thus maximizing beneficial use over the long-term. Sufficiency of groundwater from the Basin is further assured for the following reasons.

Inland Empire Utilities Agency (IEUA) is a member agency of The Metropolitan Water District of Southern California (MWD), which provides imported water from the State Water Project for direct use by parties to the Judgment in the Basin and for Basin recharge purposes. IEUA has also reviewed the sufficiency of supplies for its service territory that includes the Basin in connection with its Year 2010 Urban Water Management Plan (UWMP).

IEUA's UWMP is consistent with, and reiterative of, OBMP projects and programs. IEUA's UWMP projects increased requirements for imported water for direct and recharge use while noting reductions during dry years (due to increased reliance on groundwater from the Basin) and in the higher amount otherwise required in the absence of OBMP projects and programs. The UWMP also analyzes the sufficiency of water supplies for single and multiple year drought scenarios and concludes the region is expected to meet 100% of its dry year demand under every scenario.

The available water supplies and water needs for IEUA's service area were analyzed in their 2010 Urban Water Management Plan to assess the region's ability to meet demands for three scenarios: a normal water year, single dry year and multiple dry years. Key assumptions included:

- Reliance on assurances provided by The Metropolitan Water District of Southern California in its 2010 Regional Urban Water Management Plan that it could meet 100% of projected supplemental full service water supply demands through 2035;
- Implementation of the Chino Basin Dry Year Yield Program consistent with the contractual shift obligations of the participating agencies of up to 33,000 acre-feet in a twelve month period; and

- A 10% conservation rate is achieved during drought scenarios.

IEUA concluded in its 2010 UWMP is that the retail agencies within its service area will be able to meet 100% of their demand under every scenario.

California Water Code Section 10631(j) provides that urban water suppliers, such as IEUA, that rely upon a wholesale agency for a source of water may rely upon water supply information provided by the wholesale agency in fulfilling UWMP informational requirements.

IEUA's independent analysis of contemporary regional water conditions in conjunction with MWD's most recent report, provide additional and reliable assurances concerning the sufficiency of imported water supplies that comprise a portion of overall Basin supply sufficiency. As stated in the above-quoted OBMP text, however, "expanded use of imported water in the northern part of the Basin will have a lower priority than maintaining groundwater production in the southern part of the Basin".

IEUA's March 19, 2003 correspondence also references MWD's 100,000 acre-feet water storage and recovery program which, along with future storage and recovery projects will drought-proof the Basin and all other

appropriative pool members (including the City of Ontario) from imported water shortages. Watermaster finalized an agreement for the MWD 100,000 acre-feet program that will include 8,076 acre-feet per year of participation by the City of Ontario and thus further enhancing the sufficiency of the City of Ontario's groundwater supply. This program is consistent with OBMP Program Element No. 9-Develop and Implement Storage and Recovery Program. Benefits to the Basin associated with this program include the construction of facilities to enhance imported water deliveries and the production of water from the Basin. Further demonstrating the sufficiency of Basin groundwater is MWD's program to use the Basin for dry year supply purposes, thus underscoring that sufficient Basin groundwater is available during dry years not only for local use by agencies such as the City of Ontario but also in connection with MWD's regional reliability programs.

In conclusion, the sufficiency of groundwater from the Basin is assured due to the City of Ontario's legal right to produce water necessary to meet ultimate demands in conjunction with OBMP objectives. These OBMP objectives overseen and administered by the Chino Basin Watermaster specifically direct and assure, under the auspices of continuing Court jurisdiction, the long-term production of water from the southern part of the Basin where the City of Ontario is partially located.

## **SECTION 5 - Primary Issue for Assessment**

### **Findings**

Whereas:

1. The City of Ontario has been identified as the public water supplier for the Meredith International Centre (Project).
2. The projected water demand for the project is 741 acre-feet per year.
3. The water demand for this project was included in the "2010 Urban Water Management Plan" by AKM, June 2011, which was adopted by the City of Ontario by Resolution 2011-039 dated June 21, 2011.
4. The City of Ontario's existing water supply (2011) is 103.04 mgd (71,554 gpm) (115,403 acre-feet per year) while the maximum day demand is 53.87 mgd. The projected 2035 water supply is 86,301 acre-feet. "...The City has the ability to pump more water if needed as the City's groundwater pumping capacity is greater than needed to meet the annual demands, as additional wells are used to meet the maximum day demand." (Section 5-1 of Appendix A)

5. The City of Ontario has water rights in the Chino Groundwater Basin and capacity rights (25.4 mgd) in the WFA Treatment Plant. The City also has contracted for 8,533 acre-feet per year from the Chino Desalter Authority. The projected recycled water use is 18,385 acre-feet per year by 2035.

The City of Ontario has sufficient water supply to provide water to the proposed project during normal, single dry, and multiple dry years during a 20 year projection, in addition to meeting the City's existing and planned future uses, including this project.