

Section 1 Introduction

1-1 Purpose and Scope

The City of Ontario provides domestic water service to a population of approximately 173,000 residents and is projected to serve over 358,270 residents and serve employers providing over 330,023 jobs. The City recognizes the need to provide it's customers with the most economically feasible source of water supply. With the decreasing supply and escalating costs of imported water, Recycled Water provides an alternate and more economical source of water supply for irrigation and some industrial processes. The City currently has 173 Recycled Water Connections delivering 2,907 Acre Feet of Recycled Water per Year (AFY) to non-Agricultural Users and an additional 4,124 AFY to agricultural users.

Building off of Section 10 of the City of Ontario's 2006 Water and Recycled Water Master Plan, the Purposes and Scope of this report are:

- To catalogue existing users as of December 2009;
- Identify all new potential future users at build-out;
- Determine economic feasibility of: connecting potential future users and developing the City's Recycled Water Infrastructure;
- Size future delivery pipelines for build-out;
- And to create a long range Capital Improvement Plan.

1-2 Previous Studies

Previous studies completed and utilized in the development of this Water Master Plan include the following:

- The Ontario Plan (General Plan), February 2010
- The Ontario Plan Environmental Impact Report, April 2009
- City of Ontario Water and Recycled Water Master Plan Update, April 2006
- City of Ontario Urban Water Management Plan 2010
- The Inland Empire Utility Agency Recycled Water Implementation Plan, Final Report November 2005

1-3 Data Source

Unless otherwise specified in this document, all data used in this report comes from the following sources:

- Existing Recycled Water Customer Data is as of 12/31/2009.
- Demands for Potential Users that are existing customers were taken from actual Irrigation and Process Water meter data for those customers from 9/1/08 to 8/31/09.
- Demand Factors for Potential Future uses that are currently vacant land were developed using:
 - o The demands for Potential Users that are existing customers as stated above;
 - o Actual meter data for current City Recycled Water Users for meter data from 9/1/2008 to 6/30/2011;
 - o Recycled and Potable Water use data from the City of Chino for the Preserve, 1/1/2010 to 12/31/2010.
 - o City GIS data for parcel areas as of the time of each inquiry between January 2009 to October 2011.
- Information regarding IEUA's regional system was based upon their November 2005 Plan, and information provided by IEUA Staff to the City Staff through meetings on 10/14/2010 and 1/18/2011, and an email correspondence on containing IEUA's current hydraulic model on 11/15/2010.

1-4 Data Modeling

The data model is based upon a data model provided to the City by IEUA on 11/15/2010, with the modifications as described in Section 6.

1-5 Acknowledgements

The Recycled Water Master Plan Project Team Staff would like to thank the following people for their contributions to this document: Scott Murphy and Melanie Mullis from the City of Ontario's Planning Department; Sylvie Lee and Liza Munoz from the Inland Empire Utility Agency (IEUA); and Zeki Kayiran, Diann Pay, and Serpil Kara from AKM Consulting Engineers.

1-6 Recycled Water Master Plan Project Team Staff

The following City Staff Members were involved in the preparation of this report:

Utilities General Manager: Mohamed El-Amamy

Assistant Utilities General Manager: Scott Burton, P.E.

Engineer-In-Charge: Dennis Mejia, P.E., Utilities Engineer Division Manager

Project Manager: Jeffrey F. Krizek, Associate Engineer

Contributing Staff: Sheldon Yu, P.E., Senior Associate Engineer
Ivan Sanchez, Engineering Assistant/GIS
Cynthia Heredia-Torres, Assistant Engineer
Ryan Bengsch, Assistant Engineer

1-7 Abbreviations

The abbreviations utilized in this report are contained in Table 1-1.

Table 1-1	
Abbreviations	Abbreviation Explanation
ac, AC	Acre
AF	Acre-Foot or Acre Feet
AF/AC	Acre-Feet per Acre per Year
AFY	Acre Feet per Year
amsl	Above Mean Sea Level
CDPH	State of California Department of Public Health
cfs	Cubic Feet per Second
CIP	Capital Improvement Program
City	City of Ontario
DPH	State of California Department of Public Health
Dia	Diameter
DWMP	Domestic Water Master Plan
DW	Domestic Water
FCV	Flow Control Valve
fps	Feet per Second
ft	Feet
FY	Fiscal Year
GIS	Geographic Information System
gpd	Gallons per Day
gpm	Gallons per Minute
HGE	Hydraulic Grade Elevation
in	Inch
IEUA	Inland Empire Utilities Agency
LF	Lineal Feet
mg	Million Gallons
mgd	Million Gallons per Day
NMC	New Model Colony
OMC	Old Model Colony
PRS	Pressure Regulating Station
PRV	Pressure Reducing Valve
psi	Pounds per Square Inch
PVC	Polyvinyl Chloride
SF	Square Feet
UWMP	Urban Water Management Plan Note: for Current and Previous Land Use Categories See Table 3-1 and Appendix B