

### **INTRODUCTION**

Groundwater is a key component of the water supply picture for Southern California. On a regional level, local groundwater production is used to meet nearly 40 percent of the total annual water demands within Metropolitan's service area. Groundwater production is used to offset peak seasonal water demands on the imported water treatment and distribution systems. Further, surplus water supplies available during wet years are stored in groundwater basins for later use during dry, drought, or emergency periods. As such, the groundwater resource is a key component of water supply reliability planning within Metropolitan's service area. The Groundwater Assessment Study provides a description of the current status of groundwater within The Metropolitan Water District of Southern California (Metropolitan) service area.

### **PURPOSE**

In October 2005, the Metropolitan Board of Directors (Board) directed staff to conduct this Groundwater Assessment Study. The purpose of the study is to document the current status and use of the groundwater basins within the Metropolitan service area.

Groundwater is an important part of Metropolitan's Integrated Water Resource Plan (IRP). The IRP sets out reliability strategies for dry years, and has targeted dry-year yield from service-area groundwater basins of 275,000 AFY by 2010, and 300,000 AFY by 2020/25. Because Metropolitan plans for the potential of three consecutive dry years, the yield targets are multiplied by three for dry-year storage target of 825,000 AF by 2010 and 900,000 AF by 2020/25. These dry-year targets rely on healthy groundwater basins that can maintain baseline annual production during dry years and, in addition, produce the stored dry-year supplies.

As of late 2006 Metropolitan has developed strategies and executed ten contractual agreements for development of dry-year groundwater storage within its service area. Contractual storage capacity totals to nearly 422,000 AF with progress being made each year to fill the storage accounts. Additionally, Metropolitan delivers approximately 200,000 AF of replenishment service in normal years, and for planning purposes anticipates ability to interrupt this service during dry years with groundwater basins able to maintain production levels for three years. To further encourage development of groundwater, Metropolitan also provides incentives for recovery of poor quality groundwater through its Local Resources Program.

Additional progress needs to be made toward the IRP dry-year yield targets for in-service area groundwater storage. This Groundwater Assessment Study provides the basic framework for policy discussions and development of strategies that will allow new thinking about how the groundwater basin resources can be best integrated into the IRP for water supply reliability.

### **REPORT ORGANIZATION**

This report provides a status update on groundwater basins throughout Metropolitan's service area from Ventura County in the north to the southern limits of San Diego County in the south and east into Riverside and San Bernardino Counties.

Chapter I – Introduction

Provides statement of purpose and outline for report.

Chapter II - Methodology

Documents the methodology used to compile the information and mapping.

Chapter III – Regional Overview

Provides a regional overview for orientation and perspectives of the overall service area. It also provides some key discussion of basic differences among the groundwater basins that are important to understanding and interpreting the detailed groundwater basin reports.

Chapter IV – Groundwater Basin Reports

Provides detailed overviews of basins or groups of basins that are organized by sub-regions.