

## **CHAPTER 8 WATER SHORTAGE CONTINGENCY PLAN**

The Chino Desalter Authority (CDA) water supply is groundwater in the southern portion of Chino Basin. Groundwater is a stable source of supply that is not impacted by climate or other causes of potential water shortage common to imported water supplies. The CDA facilities, therefore serve as a contingency source for local CDA water supply agencies, and through mutual aid, other adjacent water supply agencies.

For example, during June 2004, treated imported water supply was interrupted when there was an unplanned shutdown of the Rialto Feeder pipeline for repairs. The Chino 1 Desalter was in full operation, producing 8-mgd. The CDA member agencies, the City of Chino, and the City of Chino Hills did not suffer a water shortage. Retail agencies in the northern Chino Basin did experience water shortage. The CDA entities did curtail their water usage as was directed by wholesale agencies MWD, CBWM and IEUA. The CDA curtailments were on stand-by to supply directly affected agencies if necessary.

### **8.1 MUTUAL AID AGREEMENT – REGIONAL AGENCIES**

The IEUA and the Regional Contracting Agencies (consisting of the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland and the Cucamonga Valley Water District) agreed<sup>2</sup> (See Appendix I) that, in the event of any disruption or damage to the ability of either the IEUA or Regional Contracting Agencies to continue to serve the public or its customers with water service, sewage service or sewage treatment service, the other party will cooperate to the maximum extent possible (as determined in its discretion) to provide mutual aid assistance as requested.

This Agreement provides for mutual aid assistance when requested by an agency or agencies in the event of any disruption or damage to any agency's infrastructure. This includes even the delivery of water from one agency's system to another under catastrophic conditions or during drought periods.

Western Municipal Water District (WMWD) has developed a similar mutual aid agreement with the retail agencies in its service area. When an agency determines that it cannot meet its needs on its own, it can request assistance from other agencies. The assistance needed could be equipment, materials, or personnel. Each agency will participate at its discretion; however, no agency shall be required to deplete unreasonable amounts of its own resources, facilities, and services in furnishing such mutual aid.

<sup>2</sup> Mutual Aid Agreement between IEUA and Regional Contracting Agencies, April 21, 2004

## **8.2 PLANNING FOR A CATASTROPHE – DESALTER WATER SERVES AS A BACKUP**

Southern California's three imported water supplies (State Water Project, Colorado River Aqueduct and the Los Angeles Aqueduct) cross the San Andreas Fault. Many other fault lines bisect major water facilities throughout the region. Experts consider it likely that one or more of these supplies will be disrupted in the event of a major earthquake.

MWD estimates that restoring service on any of these facilities following a catastrophic outage could take up to six months. This, in turn, could reduce annual deliveries by up to 50% for MWD-supplied water. The Urban Water Management Planning Act requires agencies to consider the effect of a 50% cutback in water supplies. This corresponds approximately to the degree of cutback contemplated by MWD's earthquake disruption scenario.

In 2000, IEUA updated its 1996 emergency response plan for its service area. IEUA expects to meet emergency demands within the region through extraordinary conservation and groundwater pumping measures. Multiple sources of power exist within the service area, making any electrical shortages a temporary disruption (see IEUA 2010 UWMP for details on its Water Shortage Contingency Plans).

WMWD participated in the Multi-Jurisdictional Local hazard Mitigation Plan (LHMP) for the Riverside Operational Area to identify and plan for local hazards. Identified hazards include earthquakes, flooding, hazardous material incidents, power losses, extreme weather, and terrorism. Using knowledge through the LHMP, WMWD then adopted its Emergency Response and Recovery Plan in January, 2005. This document is designed to prepare WMWD for a planned response to emergency situation as associated with natural disasters, technological incidents, and national security emergencies in, or affecting, and water/wastewater utility facility in its service area (see WMWD 2010 UWMP for additional details).

In February 2008, in anticipation of possible water supply shortages, the MWD Board of Directors adopted the Water Supply Allocation Plan (MWD WSAP). The MWD WSAP provides guidance for allocating limited water supplies to Member Agencies should the need arise. MWD continues to closely monitoring water supply conditions.

In response to MWD's WSAP, the IEUA and WMWD developed a Drought Plan for the purpose of implementing the MWD WSAP, within the IEUA and WMWD service areas in a manner that is fair and equitable to their Member Agencies. The IEUA and WMWD Drought Plans are consistent with and supplements the MWD WSAP for specific IEUA/WMWD service area drought planning issues. All MWD WSAP definitions, policies, principals and program provisions are incorporated here by reference and are considered to be a part of the IEUA and WMWD Drought Plans. For example, if IEUA is not imposed a penalty from MWD then IEUA would not impose a penalty on a member agency within IEUA's service area. In addition, MWD does not allow resale or "marketing" of MWD WSAP allocation credits and IEUA will not allow IEUA Drought Plan credits to be sold internally within IEUA's service area or externally without IEUA's

approval. A complete copy of the adopted Drought Plans and MWD WSAP is provided as an appendix to IEUA and WMWD's 2010 UWMP.

IEUA and WMWD Drought Plans are consistent with and contribute to the existing IEUA/WMWD imported water policies and programs. For example, both plans encourage development and full utilization of local water resources, such as recycled water and conservation measures. The IEUA Drought Plan also address MWD's Chino Basin Groundwater Storage Dry Year Yield (DYY) program and the need for best management of DYY program "shift" obligations concurrent with MWD WSAP reductions of imported water supplies to IEUA/WMWD.

The Chino Desalters serve as a major potable water backup source in the Basin. The Desalters currently produce 24,600 AFY of potable water. With the CDA Agreement of September 21, 2001 and the Mutual Aid Agreement of April 21, 2004, water can also be wheeled to agencies outside the CDA service area.

### **8.3 DRY YEAR YIELD**

In 2002, IEUA executed an agreement with the MWD to utilize the Chino Basin for dry year storage of up to 100,000 acre-feet of surplus imported water and new groundwater pumping capacity of 33,000 AF in a twelve month period. A 50,000 AF expansion of the DYY Program has been discussed and is currently under review by MWD and the participating agencies. (The environmental study was complete in December 2008.) The DYY Program is described in Chapter 7 of IEUA's 2010 UWMP. This stored water and more importantly these new groundwater production facilities and the Chino Desalters with their new water transmission lines, pumping plants and storage tanks increase significantly local supplies and reliability to meet shortages and emergency outages by individual agencies and with the interconnections between utilities allow for mutual supply arrangements.