

# **The Alliance for Water Awareness and Conservation**



## **Operational Plan**

Adopted November 2006; amended November 2009

**Alliance for Water Awareness and Conservation  
(AWAC)  
Operational Plan**

**Table of Contents**

Purpose of Operational Plan	Page 3
Applications	Page 4
Operational Guidelines	Page 6
Actions	Page 8
Results	Page 11
AWAC Participating Agencies	Page 12
Results Data	Appendix A

**Purpose**

This operational plan is intended for the use of AWAC's participating agencies to illustrate and report on conservation activities in their service areas in accordance with state requirements. Non-participating agencies or companies may refer to this plan for purposes of illustrating region-wide water conservation efforts.

The activities and outreach undertaken by participating agencies in AWAC include feasible water conservation alternatives for: execution of conservation goals and programmatic requirements of retail water agencies and companies with an adopted Urban Water Management Plan (UWMP); implementation of the Demand Management Measures (DMM) and conservation priorities as contained in the Mojave Water Agency Integrated Regional Water Management Plan (IRWMP); meeting the water conservation goals of the signatories to the Memorandum of Understanding (MOU), including the Best Management Practices (BMP) as established by the California Urban Water Conservation Council (CUWCC); non-signatories to the CUWCC MOU implementing DMM or BMP outside of the parameters of the MOU; and, any water producing entity, public or private, with water conservation and awareness objectives.

Participation agencies are public and private agencies acting collaboratively as stakeholders in water conservation within the Mojave Water Agency (MWA) 4,900 square mile service area. In order to establish comprehensive regional support for water conservation and awareness, AWAC works cooperatively and aggressively to develop, promote and implement water conservation throughout the region.

### **AWAC Applications**

Founded in August 2003, AWAC has worked to meet the water conservation needs of the region through cooperation between participating agencies. AWAC works to help all water customers use water more efficiently, including: new and existing homeowners; landscape suppliers; professional and commercial landscapers; developers; commercial, industrial, and institutional entities; and, retail and municipal water providers. AWAC was formed to provide a vehicle to attract support for a regional water conservation program and to coordinate implementation of activities by forming partnerships to obtain common measurable goals. AWAC set three goals that aim to change water-use habits and empower High Desert communities with the tools to ensure adequate supplies of water for future generations:

- (1) Educate the local communities with the understanding of the importance of water conservation;
- (2) Provide the local communities with the tools to effectively reduce per capita consumption to targeted goals; and,
- (3) Reduce regional water use by 10 percent gross per capita by 2010 and 20 percent gross per capita by 2020 (5 percent in the Morongo Basin by 2015) to achieve a sustainable, reliable supply to meet regional water demands.

### **UWMP Act and Regional Implications**

Each participating agency that has adopted an UWMP in accordance with the 2003 California Urban Water Management Act requirements including amendments made by Senate Bill 610 and Assembly Bill 901 has responsibilities for achieving water conservation goals, often implemented as DMM in a UWMP. This Operational Plan illustrates region-wide efforts toward water demand management that can be applied to and used to help satisfy reporting on some of these requirements.

### **Mojave Water Agency IRWMP DMM**

MWA has developed an IRWMP through a comprehensive systems approach. The Plan integrates components related to groundwater management, urban water management, agricultural water use, environmental habitat protection and restoration, water quality, and stakeholder and public outreach. The Plan meets requirements of the Urban Water Management Planning Act and requirements for Groundwater Management Plans pursuant to the Water Code and components recommended by the California Department of Water Resources (DWR).

The fourteen (14) DMM identified in the MWA IRWMP are based on the BMP established by the CUWCC. When applicable, each AWAC action listed in this plan will be directly linked to the specific DMM for the use of both CUWCC signatory and non-signatory agencies. The DMM are as follows:

- 1- Water survey programs for single-family and multi-family customers
- 2- Residential plumbing retrofit
- 3- System water audits, leak detection and repair
- 4- Metering with commodity rates for all new connections and retrofit of existing connections
- 5- Large landscape conservation programs and incentives
- 6- High efficiency clothes washing machine financial incentive programs
- 7- Public information programs
- 8- School education programs
- 9- Conservation programs for CII accounts
- 10- Wholesale agency assistance programs
- 11- Retail conservation pricing
- 12- Conservation coordinator
- 13- Water waste prohibition
- 14- Residential high efficiency toilet replacement programs

### **Desert Communities Water Awareness Expo Convergence**

The Desert Communities Water Awareness Expo (Expo) was formed in 1993, and promoted water awareness in High Desert venues, including trade shows and at the Victor Valley Mall. In 2007, in order to combine resources for more effective outreach and conservation, the Expo group consolidated with AWAC, becoming the Expo Committee. The long-term commitment and recognition attributed to Expo added a great resource to the AWAC group and mission.

### **Water Use Reduction Goals**

As illustrated in the goals set by AWAC, actual water use reduction is a primary indicator for the effectiveness of foundational water conservation outreach and education. By monitoring production data and delivery volume by retailers throughout the MWA service area, the consolidation of that data into a common database can be used to track use reduction throughout the MWA service area.

Through the promotion and establishment of water efficient ordinances for landscaping, water waste and mandated irrigating and outdoor washing times, many communities enforce water conservation by implementing jurisdictional mandates related to water conservation. Participating agencies in AWAC have unique jurisdictional requirements varying from town, to city, to county. Each reporting jurisdiction will have a different combination of ways to meet the DMM based on which components of mandatory water conservation have been adopted in their communities.

## **AWAC Operational Guidelines**

AWAC is funded through participating member contributions and includes volunteering, in-kind services and materials.

AWAC conservation goals are primarily accomplished through event and committee-based participation.

### **Committee Structure**

The AWAC committee structure includes the general membership, specialized standing committees, a Steering Committee and an Executive Director.

### **General Membership**

The general membership is comprised of individual employees who represent the participating agencies. This group meets on a quarterly basis to discuss programs and policies and to prioritize time, events and resources.

### **Specialized Committees**

Specialized committees are standing committees that include the Education, Expo, Landscape and Morongo Basin Committees. All committee members develop, implement and participate in event-based conservation outreach throughout the MWA service area. Each committee has a chairperson who provides a report on their committee decisions and activities to the general membership and the Steering Committee on a quarterly basis.

### **Education Committee**

The Education Committee is responsible for organizing and implementing the development of public education materials for event participation, promoting curriculum for school-aged presentations and programs, and planning and executing workshops on water conservation and awareness, including landscape-related workshops. Members of the Education Committee provide primary input on information and outreach materials used by staff at AWAC and participating agency-specific events.

### **Expo Committee**

The Expo Committee is responsible for planning AWAC participation in the annual springtime Home and Garden trade show. Planning for the: staffing and stocking of booths dedicated to unique components of water conservation; children's activities; water conserving prize raffle; and, providing informational outreach ranging from mini-workshops to one-on-one public education by professionals in the water field. Members of the Expo Committee include members who have been working on water conservation outreach in the High Desert for over fifteen years.

**Finance Committee**

The Finance Committee is responsible for monitoring the financial aspects of AWAC. Members of the Finance Committee work with the MWA Finance Department to report on revenues and expenditures, and also provide outreach to acquire contributions from member agencies.

**Landscape Committee**

The Landscape Committee is responsible for developing and implementing water efficient landscape and irrigation information, working with regional nurseries to provide public information on water efficient landscapes and irrigation, writing and arranging for the publication of a Plant of the Month, keeping water efficient plant lists, and developing the AWAC Calendar. Members of the Landscape Committee are knowledgeable about and promote water efficient landscape practices.

**Morongo Basin Committee**

The Morongo Basin Committee is responsible for implementing programs unique to the Morongo Basin area and providing input and participation to general membership, especially on water conservation programs that are currently being implemented in Morongo Basin area jurisdictions (ie. resale retrofit, greywater ordinances, and native plant availability). Members of the Morongo Basin Committee are from an area with unique water availability issues, historically low water use and a culture of water efficiency.

**Steering Committee**

The Steering Committee is responsible for making decisions based on input from the general membership and recommendations from the specialized committees. This committee works with the Executive Director and MWA Finance Department to supervise revenues and expenditures.

Members of the Steering Committee are the chairpersons of the specialized committees and have decision-making authority on: financial and budget management; prioritization of projects and events; and, other organization-wide planning efforts. The Steering Committee meets on a bi-monthly basis.

**Executive Director**

The Executive Director is responsible for participating in the activities of and providing support to the specialized committees; managing the regional incentive program; purchasing and allocating outreach materials; public relations and marketing; overseeing the MWA demonstration garden and providing technical and financial support to other High Desert water conservation demonstration gardens and projects; coordinating the Speakers Bureau; managing and coordinating website content and consultant; and, evaluating and making recommendations for conservation programs and priorities.

## **Actions**

### **Cooperation (DMM 10)**

- Technical and Legislative Support for Agency Collaboration- provide wholesaler level support on technical issues regarding water conservation
- Vendors- coordination with landscape and irrigation professionals on outreach, pilot programs and workshops
- Water Professionals- every level of employee, from crew staff to managerial staff are relied upon for input on programs, priorities and implementation

### **Event Participation (DMM 7)**

Annuals:

- Adelanto Community Water Awareness Festival- Adelanto
- Apple Valley Town Festival- Apple Valley
- Cinco de Mayo Festival- Victorville
- Earth Day- Yucca Valley
- Healthy Seniors Aging Fair- County Fairgrounds, Victorville
- Grubstakes Days- Yucca Valley
- Hesperia Public Works Day- Hesperia
- Home and Garden Trade Show- County Fairgrounds, Victorville
- Landers Orchid Festival- Landers
- Morongo Basin Relay for Life - Yucca Valley
- Phelan Phamily Phun Days- Phelan
- Pinon Hills Summerfest- Pinon Hills
- San Bernardino County Fair- Victorville
- Turtle Days- Joshua Tree
- Victorville Garden Party- Victorville

### **Innovation**

- Water Conservation Incentive Program (may meet any combination of **DMM 5, 6, 9 or 10**)
  - High efficiency clothes washer rebates
  - High efficiency toilet rebates and vouchers
  - Turf replacement incentives for residential and commercial users
- Production and Conservation Data Compilation- tracks results of conservation activities by monitoring production data region-wide
- Water-efficient Landscape Ordinances- AB 1881 compliant ordinance template developed and adopted throughout multiple jurisdictions region-wide

**Outreach (DMM 7)**

- Calendar- annual publication contains water conservation tips, watering hours and desert adaptive landscaping photos
- Chambers of Commerce- membership in and presentations to business leaders to provide commercial sector outreach (may also meet **DMM 9**, under specific circumstances and depending on the level of programmatic coordination)
- Demonstration Gardens- throughout the MWA service area
- Newsletters- water conservation education, landscaping information, event and workshop advertisement, organizational summary provided to decision-makers
- Newspapers- special section inserts, incentive program advertisement
- Plumbing Retrofit Items- water conserving hardware is distributed with AWAC logo and website address
- Promotional Items- various items distributed with AWAC logo and website address
- Public Service Announcements (radio and television)- water conservation education, incentive program advertisement
- Public Workshops (specific workshop topics also meet other **DMM**)
  - Agricultural Pumping Efficiency
  - High Desert Adaptive Plant Types and Native Species
  - Indoor and Outdoor Water Conservation
  - Utility Billing and Governmental Powers
  - Water Efficient Irrigation Planning, Installation and Maintenance
  - Water Efficient Landscaping Planning, Installation and Maintenance
  - Winterizing to Avoid Water Emergencies and Repairs
- Speakers Bureau- engage with community organizations and groups on water conservation appearances, lectures and speeches
- Website- provide all-hour access to up-to-date water conservation and efficiency information

**Literature/Curriculum (DMM 8)**

- Educational Partnerships- working with school districts, charter schools, Barstow College, Copper Mountain College, and Victor Valley College
- Landscape Templates (also **DMM 5**)- developed for homeowners, businesses and landscaping professionals for use in designing desert appropriate landscapes
- *Beautiful High Desert Gardening* CD-Rom- provides in-depth analysis of plant types, soil types and hydrozones for High Desert species
- *High Desert Water-wise Landscaping* DVD- promoting water efficient landscaping techniques in design and implementation using a workshop approach
- Mojave Environmental Education Consortium (MEEC) Executive Board Position- developing curriculum and funding environmental education region-wide

- Nursery Program and Informational Plant Stands- water efficient plant types and desert adaptive species are presented to the public in attractive displays for use by professional plant nurseries
- Outreach Materials- developed for distribution and informational purposes
  - *A Guide to High Desert Landscaping* Booklet
  - *A Complete Guide to High Desert Water Conservation* Booklet
  - *High Desert Vegetable Planting Guide*
  - Water Efficient and Native Plant Lists
  - *Water Efficient Irrigation* Pamphlet
  - *Water Efficient Landscaping* Handout
  - *Water-Smart Landscaping* Pamphlet
- Plant of the Month- monthly publication in local newspapers illustrating the beauty and efficiency of High Desert natives and water efficient plant types
- Project WET Training- working with water agency staff to provide educational training in water conservation in order to provide lessons on water conservation to school-aged children

## **Results**

### **Production Reduction**

As stated in the purpose of this plan, water use reduction is a strong indicator of the success of water conservation efforts. 2000-2008 production data shows a region-wide water use reduction of approximately 22% within the MWA service area (Appendix A). This has been accomplished while AWAC provided public education and worked with High Desert decision makers to adopt water conservation ordinances and policies. When combined with the 40% population growth experienced in the High Desert during this same period of time, it can be confidently stated that the efforts of AWAC are successfully contributing to water use reduction.

### **Physical Landscape Changes**

The transplanted lawn with tropical accent plants is a thing of the past for new and rehabilitated landscapes in the High Desert. Through promotion and education on desert adaptive landscapes, AWAC's participating members have led the way in educating decision-makers to enforce and adopt stricter requirements for landscaping in residents. Desert-adaptive landscaping and drought tolerant plant species are replacing turf in all land use types.

This has also become the norm within the High Desert's commercial sector. Renewable energy, green building and water-energy nexus decisions have become a common component of business planning decisions. Business owners who incorporate water conservation into their business plans save money and resources and may gain additional credit in the entitlement process. AWAC helps businesses by developing information on water conservation and providing rebates for turf replacement.

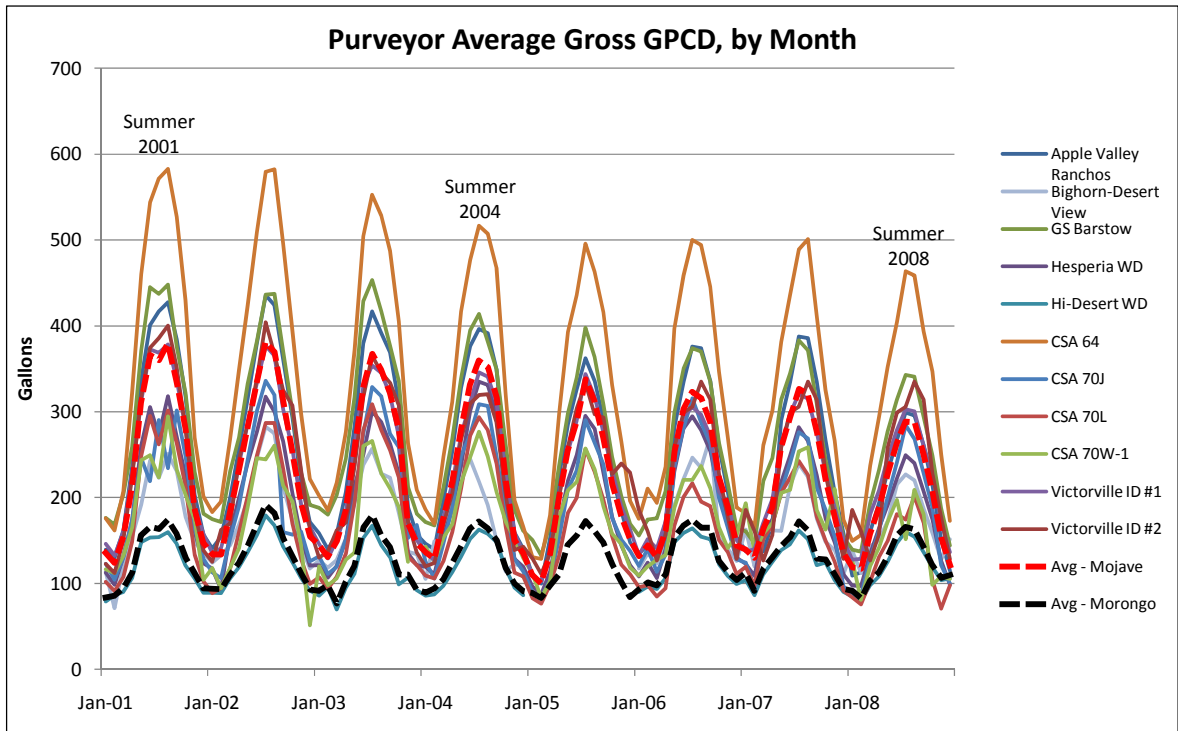
### **Cultural Shifts**

The foundational qualities of outreach and public education provide immeasurable value in an arid, desert environment. Through agency cooperation and sponsorship of event participation to promote water conservation, AWAC has increased its visibility and recognition throughout the desert. With continuing growth and residents moving from other areas within California and beyond, there is constantly a fresh audience to educate on the importance of water resources in an arid environment. AWAC will continue to make water conservation education available at public events and through agency-specific activities to ensure that the population is equipped with the tools and information to wisely manage our water supply.

**AWAC Participating Agencies**

City of Adelanto  
Town of Apple Valley  
Apple Valley Heights County Water District  
Apple Valley Ranchos Water Company  
City of Barstow  
Barstow College  
Bighorn-Desert View Water Agency  
Bureau of Land Management  
Copper Mountain College  
Golden State Water Company  
City of Hesperia  
Helendale Community Services District  
Hi-Desert Water District  
Joshua Basin Water District  
Juniper Riviera Water District  
Mariana Ranchos Water District  
Mojave Desert and Mountain Recycling Authority  
Mojave Desert Resource Conservation District  
Mojave Water Agency  
Mojave Weed Management Area  
Phelan Pinon Hills Community Services District  
San Bernardino County Special Districts Water/Sanitation Division  
San Bernardino County Fairgrounds  
Thunderbird County Water District  
University of California Cooperative Extension  
Victor Valley College  
Victor Valley Wastewater Reclamation Authority  
Victorville Water District

**Appendix A**



\*GPCD calculated as total water production for month (gallons), divided by 30.4 days, divided by estimated population.

\*\*Not all purveyors in the region are included in the Mojave and Morongo basin area averages – only purveyors listed in the chart legend.