



**Department of Energy**  
Western Area Power Administration  
Desert Southwest Customer Service Region  
P.O. Box 6457  
Phoenix, AZ 85005-6457

FEB 24 2012

Via E-mail: [jmt@krsaline.com](mailto:jmt@krsaline.com)

Ms. Jennifer Torpey  
K. R. Saline & Associates, PLC  
160 North Pasadena, Suite 101  
Mesa, AZ 85201-6764

Re: Maricopa County Municipal Water Conservation District Number One  
5-year Integrated Resource Plan

Dear Ms. Torpey:

Thank you for submitting this plan to Western Area Power Administration (Western). The report, dated November 21, 2011, covers the reporting period of 2012 through 2016. This is your formal notice that this report has been reviewed and approved.

Data from all customers will be included in our annual report which is provided to Congress and others.

For annual updates, please use our automated on-line reporting system at <http://www.wapa.gov/FormsAuth/Login.aspx?ReturnUrl=/irpsubmit/irpsubmit.aspx>.

Western has a wide range of information on our Energy Services web site, [www.wapa.gov/es](http://www.wapa.gov/es), which may help you implement your plan. You may also call our PowerLine at (800) 769-3756 for personal assistance. If you do not have access to the web site, have questions on the guidelines, or need assistance in implementing your report action plan, please contact me at (602) 605-2659 or [colletti@wapa.gov](mailto:colletti@wapa.gov).

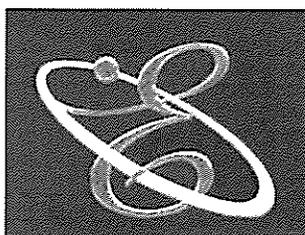
Please do not hesitate to call if I may be of further assistance in this or any other Energy Services related matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Audrey Lynn Colletti".

Audrey Lynn Colletti  
Public Utilities Specialist

cc: Darrick Moe  
Joe Mulholland  
Jim Sweeney  
Sheryl Sweeney



ENERGY OUTFITTERS, LLC

**Via E-mail & USPS**

December 29, 2011

Mr. Darrick Moe  
Regional Manager  
Western Area Power Administration  
Desert Southwest Region  
P. O. Box 6457  
Phoenix, AZ 85005-6457

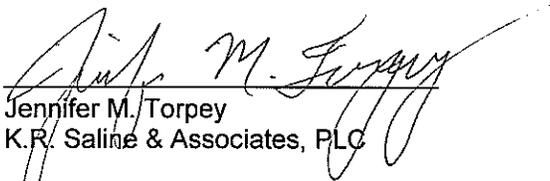
Re: Maricopa County Municipal Water Conservation District Number One Integrated Resource Plan

Dear Mr. Moe,

As you know, Western Area Power Administration's ("Western") Integrated Resource Planning Approval Criteria require Western's customers to submit updated Integrated Resource (or Small Customer) Plans to the appropriate Regional Manager every five years after Western's approval of the initial Plan. Enclosed on behalf of Maricopa County Municipal Water Conservation District Number One ("MWD"), pursuant to 10 C.F.R. § 905.13(b), is the third five-year update to MWD's Integrated Resource Plan. This update was approved by MWD's Board of Directors at a public meeting held on November 21, 2011.

If you have any questions regarding this Integrated Resource Plan, please do not hesitate to contact me.

Sincerely,

  
Jennifer M. Torpey  
K.R. Saline & Associates, PLC

Enclosure

cc: Jim Sweeney (w/encl.)  
Sheryl Sweeney (w/encl.)  
Audrey Colletti (w/encl.)  
Joe Mulholland (w/encl.)

# **INTEGRATED RESOURCE PLAN**

**THIRD FIVE-YEAR UPDATE**

**MARICOPA COUNTY MUNICIPAL WATER  
CONSERVATION DISTRICT NUMBER ONE**

**November 21, 2011**

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## Profile Data

Maricopa County Municipal Water Conservation District Number One ("MWD" or "the District") is an irrigation and water conservation district organized in 1925 pursuant to Chapter 19 of Title 48 of the Arizona Revised Statutes. MWD obtained a power purchase certificate from the Arizona Power Authority ("the Authority") in 1949. MWD has been providing electrical service to its service area since the 1920's. MWD is governed by a five-member Board of Directors elected by landowners within its boundaries to staggered three-year terms.

With a service area of approximately 40,000 acres, MWD utilizes its purchased power both to service agricultural and other loads and to provide power for its own loads which include pumping loads for District wells, and its recreation and utility operations at Lake Pleasant. MWD's Lake Pleasant development, Pleasant Harbor, currently consists of a marina with over 550 slips, dry-docks, a water plant and wastewater treatment facilities, 254 recreational vehicle (RV) sites, pools, offices and other facilities on approximately 225 acres of land. A map of MWD's boundary is provided in **Appendix A**.

MWD's Board of Directors and contact persons are detailed below.

- **Board of Directors**

Leyton Woolf—President  
 Michael Moore—Vice President  
 David J. Schofield—Secretary/Treasurer  
 Samuel C. Colgan  
 Henry Conklin

- **Contact Persons**

James R. Sweeney—General Manager  
 P. O. Box 900  
 Waddell, AZ 85355-0900  
 Ph: (623) 546-8266  
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Sheryl A. Sweeney—Legal Counsel  
 Ryley, Carlock & Applewhite  
 One North Central Avenue, Ste. 1200  
 Phoenix, AZ 85004-4417  
 Ph: (602) 440-4824  
 Fax: (602) 257-6924

Kenneth R. Saline—Engineering Consultant  
 K. R. Saline & Associates, PLC  
 160 N. Pasadena, Ste. 101  
 Mesa, AZ 85201-6764  
 Ph: (480) 610-8741  
 Fax: (480) 610-8796

MWD purchases Hoover power from the Authority, SLCA/IP power from Western Area Power Administration (“Western”), and other power from Arizona Public Service Company (“APS”). In addition, MWD is a participant in the Hoover Resource Exchange Program and a party to the Integrated Resource Scheduling Agreement. These arrangements permit MWD and other similarly situated utilities to integrate and exchange Hoover and SLCA/IP power resources. The power and energy from the Authority, Western, and APS are transmitted over the Parker-Davis transmission system, the Pacific Northwest-Pacific Southwest Intertie transmission system, the Colorado River Storage Project (“CRSP”) transmission system and the transmission system of APS. Under a contract with APS, the power and energy are delivered over APS’s facilities from the transmission system delivery points to the customers of MWD. MWD does not own any portion of the transmission or distribution system, with the exception of certain distribution transformers and Pleasant Harbor. Also, certain distribution transformers located at MWD customer locations are owned by the MWD customers.

Although MWD officially maintains an acreage assessment as a component of its fixed operation and maintenance expenses, the current assessment is \$0 with expenses being met out of power, water and recreation revenues. The policies for service and rates for power provided by MWD to its customers are determined and set by its Board of Directors. Copies of MWD’s current rate schedules are attached as **Appendix B**.

In addition to crop prices and operating costs, the overall financial feasibility of the farming operations in the District is significantly impacted by water costs. Both the District’s wells and its farmers’ wells are supplied with MWD electrical power. MWD purchases the majority of its power resources from the Authority and Western.

The current projection of the District loads for the upcoming two-year period does not indicate that additional resources are needed. As the area around the District becomes urbanized, however, irrigation pumping loads are anticipated to be replaced by other non-agricultural loads. The District will endeavor to add a number of new loads in order to better preserve an affordable rate for irrigation pumping, and to fully utilize the District’s take or pay resources. The resource scheduling and utilization of the District’s resources have been managed through the Authority’s Hoover Resource Exchange Procedures and through the District’s participation in an Integrated Resource Scheduling program for Hoover and SLCA/IP resources, respectively. These resource management programs have provided the necessary flexibility for the District to re-pattern its resources monthly to meet its changing loads and exchange the resources with other preference entities who can temporarily utilize the power during the same periods. With the continuation of these programs, and current loads and resources, there is not any short-term need for additional resources for the District. Therefore, the District will use its current entitlements of Hoover and SLCA/IP resources with intermittent purchases of APS supplemental power to meet its projected loads through the two-year planning period. For the five-year planning period, a need for additional resources was identified. For this timeframe, the District anticipates using its Hoover resource entitlement, its SLCA/IP entitlement, the Integrated Resource Scheduling

program, Resource Exchange Procedures, and APS and Southwest Public Power Resources Group (“SPPR Group”) resources to meet its projected loads.

## **District Goals and Objectives**

- Provide Reliable Electric Power at Lowest Practicable Cost, Consistent With Sound Business Principles
- Enhance Customer Financial Stability by Providing Services which Enhance Property Values and Provide Long-Term Stability in Electric Power Rates
- Promote Energy Efficiency and the Effective Management of Water and Power Resources

## **Competitive Situation**

- **District Contract Information**

Arizona Power Authority (Hoover Power Contract)  
 Western Area Power Administration (SLCA/IP Contract)  
 Power Supply and Services Agreement with APS [Approved by FERC]  
 Southwest Public Power Resources Group/Sempra Generation (Power Purchase Agreement)

- **Regulations Applicable to District**

Energy Planning and Management Program (EPACT '00)  
 Arizona Department of Water Resources—Groundwater Management Act

- **Regulations Applicable to District Customers**

Arizona Department of Water Resources—Groundwater Management Act

- **Competition With District Service**

APS provides retail service in direct competition to District service and has several retail rates that are openly available to the customers of MWD. In many instances, APS and MWD serve power to different loads of the same customer.

There is competition for leasing the farm ground within MWD. Many of the land owners in MWD and other districts lease ground to tenant farmers who lease property based upon lease cost and water costs (i.e., pumping costs). Therefore, to the extent that the costs in MWD become significantly higher than other areas,

the competition for farm ground may significantly impact the irrigated acreage and electric load of the District.

## Load and Resource Information

- **Historical and Five-Year Load Forecast:**

Oct-Sep	Winter Demand CP @ Sub (kW)	Summer Demand CP @Sub (kW)	Peak Annual Growth	Energy @Substation (kWh)	Energy @Meters (kWh)	Load Factor
2002	14,003	9,945		38,414,484	36,301,687	31%
2003	12,573	9,647	-10%	34,044,883	32,172,416	31%
2004	14,714	10,906	17%	40,686,028	38,448,296	32%
2005	13,364	11,998	-9%	39,168,861	37,014,574	33%
2006	16,532	13,197	24%	52,465,188	49,579,603	36%
2007	15,557	13,137	-6%	51,594,250	48,756,567	38%
2008	14,162	12,887	-9%	49,341,437	46,627,659	40%
2009	15,346	12,568	8%	48,822,926	46,137,666	36%
2010	14,795	11,743	-4%	42,556,894	40,216,266	33%
2011	17,105	14,275	16%	51,182,523	48,367,485	34%
<b>Current Forecast</b>						
2012	17,105	14,275	0%	51,182,523	48,367,485	34%
2013	17,105	14,275	0%	51,182,523	48,367,485	34%
2014	17,105	14,275	0%	51,182,523	48,367,485	34%
2015	17,105	14,275	0%	51,182,523	48,367,485	34%
2016	17,105	14,275	0%	51,182,523	48,367,485	34%

See **Appendix C** for a summary of the historical monthly load information (by operating year) as well as a graphical illustration of how the District schedules its resources to cover its loads in a typical year.

- **Customer Profile Information**

Irrigation Accounts—51%

- District Pumps—22%
- Resale Irrigation—29%

Other District Facilities—14%  
General Service—32%  
Other—3%

See **Appendix C** for a graphical illustration.

- **Supply Side Resources**

The District anticipates that current federal resources under contract and continuation of the Integrated Resource Scheduling Procedures and Resource Exchange Program will be sufficient for the District to meet its monthly power and energy requirements through the short-term planning period. Some APS supplemental power will continue to be purchased from time-to-time to cover any short-term power deviations. For the long-term planning period, the District has determined to secure an additional long-term resource to diversify its portfolio of suppliers and provide additional options for firming through the Resource Exchange Program and Integrated Resource Scheduling Procedures.

As described in the District's prior Plan, MWD spent several years participating with the SPPR Group in evaluating future resource opportunities. The SPPR Group is an association of forty not-for-profit electric utilities, including cooperatives, municipalities, tribal power authorities, and irrigation and electric districts providing service in Arizona, California, and Nevada. Taking advantage of the Group's size to broaden the scope of possible supplies, multiple options for resources were considered, including both construction of a generating unit and purchase of a portion of an existing generating unit. Ultimately, however, both of these options became infeasible due to economic and regulatory circumstances. The Group then issued a Request for Proposals ("RFP"), in response to which a variety of proposals could be submitted, including unit contingent proposals, turnkey proposals, 25-year purchase power agreements, slice of utility system offers in which the sale would be treated with the same firmness as native load, and the sale of existing generating units. The RFP was later modified to reflect the changing requirements of the participants, and required bids to be for unit contingent power or firm power from dedicated units, including slice of system sales. Bids were also required to be for fully dispatchable service. Ultimately, due to economic and other considerations, it was determined that the most practicable option was a long-term power purchase agreement. Beginning January 1, 2015, the District will begin operating, as a member of the SPPR Group, under its new Power Purchase Agreement with Sempra Generation. Detailed below are the District's current contractual commitments:

Arizona Power Authority (Hoover Power) at Buckeye and Westwing Substations

- Hoover A Capacity & Energy
  - 8,500 kW (Maximum with Hoover Firming Capacity)
  - 29,053,000 kWh (Contract Entitlement)
- Expires September 30, 2017

Salt Lake City Area/Integrated Project Capacity at Buckeye and Westwing Substations

- Winter Season CROD: 2,207 kW
- Summer Season CROD: 5,346 kW
- Contract Term: Expires September 30, 2024

- Energy entitlements by fiscal year:

<i>Fiscal Year</i>	<i>Winter Season Energy (kWh)</i>	<i>Summer Season Energy (kWh)</i>
FY 2012 - FY 2024	4,046,393	9,728,913

#### Power Supply and Services Agreement (APS)

- Capacity and Energy as needed
- Wheeling from Buckeye Substation to meters
- Meter Reading and Customer Billing Services
- Losses from Substation to Meters
  - Capacity loss factor: 7.9 %
  - Energy loss factor: 5.5 %
- Expires December 31, 2020

#### Power Purchase Agreement (Sempra Generation—through SPPR Group)

- Firm Capacity and Energy
  - 3,000 kW
  - Energy as needed
- Effective January 1, 2015; expires December 31, 2039

- **Demand Side Resources**

Much of the District's electric power is utilized to pump groundwater for agricultural purposes. The following is a list of some of the on-going water conservation practices that are implemented by the District and/or its customers to efficiently utilize water and therefore electricity.

Alternate Furrow Irrigation	Graded Furrow or Border	Micro spray Systems
Cut-Back Irrigation	Portable Sprinklers	Tail Water Recovery
Angled Rows	Uniform Slopes	Irrigation Scheduling
Shortened Field Lengths	Deficit Irrigation	Concrete Ditch Lining
Land Leveling	Soil & Water Amendments	Main Canal Telemetry Control
Precision Tillage	Use of Gated Pipe	Gate Repair
Irrigation Well Telemetry Control	Cropping Pattern- Winter vs. Summer	CAP Water Exchange Urban Delivery Policy

## Identification and Comparison of Resource Options

The identification of options for additional resources within this IRP is coordinated through an examination of the costs and benefits for each resource. Because the

majority of the District's customers already implement numerous irrigation and agricultural efficiency practices in their operations and because the Arizona Groundwater Management Act heavily regulates the use of groundwater, opportunities for additional energy savings through demand side management ("DSM") are very limited. However the District will continue to look for other opportunities for energy savings from evolving technological advances in agricultural practices. To the extent practicable, the District will also endeavor to promote customer and its own awareness of pumping workshops and other similar forums for further education on advancements in water conservation practices and technology.

## **Designation of Options**

If additional resources are needed, the least cost option is identified from a cost benefit analysis. This information is considered by the Board of Directors in public meetings and combined with other information to select an Action Plan for the District which conforms to the regulations and guidelines of the Energy Planning and Management Program. The selection of the District's Action Plan also includes consideration for reliability of service, economics, rate impacts and price elasticity, environmental effects, regulatory impacts and risks, legal considerations and risks, competitive impacts, social acceptance and public considerations and any other factors which may be identified from time-to-time which may be pertinent in selecting or implementing an Action Plan.

## **Action Plan**

- **Resource Action Plan**

The time period covered by the District's Action Plan is the five-year period from 2012 through 2016.

The District has determined that to provide reliable electric power at the lowest practicable cost, consistent with sound business principles, the District will continue using its entitlements of Hoover and SLCA/IP power to supply much of its projected power requirements over the five-year planning period. The current federal resources and continuation of the Authority Hoover Resource Exchange Program and Integrated Resource Scheduling Procedures will be sufficient for the District to meet its monthly power and energy requirements through the short-term planning period. Additional purchases of APS supplemental power will continue to be made from time-to-time to cover any short-term power deviations.

For the long-term planning period, the District has identified a need for additional resources, with the objective of increasing its options for firming resources purchased through the Resource Exchange Program and Integrated Resource Scheduling Procedures, and to serve as a successor for long-term contracts

which will terminate in coming years. Therefore, MWD has entered into a long-term power purchase agreement as a member of a group of public power entities. Together with the District's existing contractual arrangements, this is anticipated to be sufficient to meet all of the District's requirements over the five-year planning period. No further resources will be required. The District continuously reevaluates the possible need for new resources, the availability of less costly resources and the potential for additional DSM activities. The District's Resource Action Plan enhances customer financial stability by providing services that will enhance property values and provide long-term stability in electric power rates.

MWD provides electricity to farmlands that are also served by surface water supplies from the Agua Fria River. Since pumped water and surface water conserved and stored at Lake Pleasant are both essential in providing a reliable supply of water to farmed lands, the impacts of surface water deliveries upon MWD's loads can be significant from year-to-year. Even if the surface water could supply the entire water requirements for certain farms, the electric supplies are needed to backup the surface water system to reliably meet the water requirements of the farmed lands during canal outages, low lake levels or constraints in farm water delivery systems. The pumps are also critical and necessary when low winter demand makes delivering surface water through the District's Beardsley Canal inefficient. While the impact of Agua Fria surface water is significant upon the seasonal electric requirements of MWD, MWD's current resources under contract and flexibility provided from the Hoover Resource Exchange Program and Integrated Resource Scheduling procedures should be sufficient for MWD to adjust its resources to the changes in load requirements.

Since no new resources beyond those already secured are needed, there are no milestones to evaluate accomplishment of the Plan activities. Nevertheless, the District will monitor any adjustments to the Plan for the long-term resource needs and will annually review its electric loads and resources for any significant changes. In the event the loads of the District are projected to materially increase above those levels represented in the Load and Resource information, other than normal deviations due to cropping changes or weather impacts, the District will review its forecast and evaluate the need for modifying its IRP and notify Western accordingly. In any event, the District will evaluate its load forecast and resource information in detail every five years and refresh its Plan, in accordance with Western's regulations.

- **Conservation Action Plan**

MWD has decided to continue certain conservation activities to promote and maintain energy efficiency and customer awareness for conserving electric, water, and land resources.

**Period:** Calendar Year 2012 through 2016  
**Activity:** Information Exchange Program  
**Goal:** Test 20% of MWD pumping plants every year for 5 years.  
**Activity Description:** Irrigation Pump Efficiency Testing

- **Validation and Evaluation**

The District owns and operates approximately 55 irrigation pumps and is required to annually supply groundwater withdrawal information to the State of Arizona under the Groundwater Management Act. This information is usually determined using electrical usage information and pump efficiency testing. The District's program of testing pumping plants will continue to help MWD prepare groundwater reporting information and will also allow the District to evaluate each pumping plant and identify pumping plants which may be experiencing a decrease in overall pumping efficiency. Under this program the District will attempt to test each pumping plant operated within the District periodically. With the pump test information, and previous test information, an efficiency trend pattern can be prepared. From the test information, the associated cost savings that might result if the tested pump were operating at a theoretical 100% efficiency level can be calculated. The efficiency information may assist MWD in scheduling planned maintenance of the pumping plants and identify the financial benefit from performing the efficiency improvements on a more frequent basis. The ongoing pump testing and monitoring activity should encourage more frequent pump maintenance which will result in an overall efficiency improvement and energy savings. The Conservation Action Plan will be evaluated annually to determine whether 20% of the pumping plants have been tested in that year.

As noted above, the District uses its pumps in conjunction with surface water to serve its customers. Although the District cannot control the total quantity of water it receives, it can and does manage its use of the surface water to maximize both economic and conservation benefits. It is difficult to project future energy savings resulting from the use of surface water as it varies from year to year, but careful management of the water supply will assist MWD in minimizing the amount of pumping which must be performed, and therefore energy consumed.

- **Other Conservation Activities**

Over the past several years, the District has invested substantial funds in improvements to its water delivery system. These improvements included the relining of its main canal, which reduces water loss when the canal is used, and extensive replacement of open laterals within the District with closed pipeline systems which reduces seepage and evaporation. These improvements reduce

the amount of groundwater which must be pumped, which ultimately results in less electricity consumption. The District's ongoing maintenance of these improvements, as well as other improvements made as time and money allow, should also assist the District in conserving water and electric resources over the five-year planning period.

## **Environmental Effects**

The District is required, to the extent practical, to minimize adverse environmental effects of new resource acquisitions. As noted above, the District has secured an additional long-term resource which will become effective January 1, 2015. In procuring this resource, the District worked collaboratively with a group of other similarly situated entities, known collectively as the SPPR Group. Options for meeting anticipated future needs were carefully considered, including the consideration of renewable resources. The SPPR Group also utilized an Independent Market Monitor bidding process overseen by the Arizona Corporation Commission to ensure the request for proposals process resulted in the best alternative, and provided an unbiased evaluation platform. However, no appropriate renewable resource was identified. The resource ultimately selected is output from a natural gas supplied plant. Selection of a gas fired generation source will help the District avoid future purchases from coal-fired generation, or market purchases from a blended fuel mix which may include nuclear or coal. For MWD, the SPPR resource is intended to ultimately replace current supplemental power supply arrangements which utilize thermal resources. In addition, the acquisition of this resource will allow the District the flexibility to incorporate additional renewable resources which require firming, such as wind or hydro generation. Ultimately, the District intends to utilize hydro resources and its firming capabilities through the Hoover Resource Exchange Program and Integrated Resource Scheduling Procedures to meet the majority of its electric loads. To the extent the District utilizes the Integrated Resource Scheduling Procedures and the Resource Exchange Program and their firming capabilities to exchange and better utilize the hydro resources of the District and other similarly situated utilities, such efforts should be environmentally beneficial since such increased utilization would offset thermal generation purchases.

In addition to maximizing the hydro resources, the District's customers are involved in substantial water conservation programs in their farming practices. The installed water conservation investment by the District's customers is extensive and far-reaching, including laser leveling of farm fields, concrete lined ditches, drip and sprinkler irrigation systems, and pump back systems to use the farm's tail water. Their ongoing conservation practices and ongoing maintenance of conservation investments continue to conserve significant amounts of groundwater annually. To the extent the District sponsors conservation activities and information activities with its customers, the conservation of groundwater is the fundamental achievement, which is environmentally beneficial and economically sound. The overall irrigation efficiency of each farmer is heavily regulated by the State of Arizona through the Groundwater Management Act.

## Public Participation

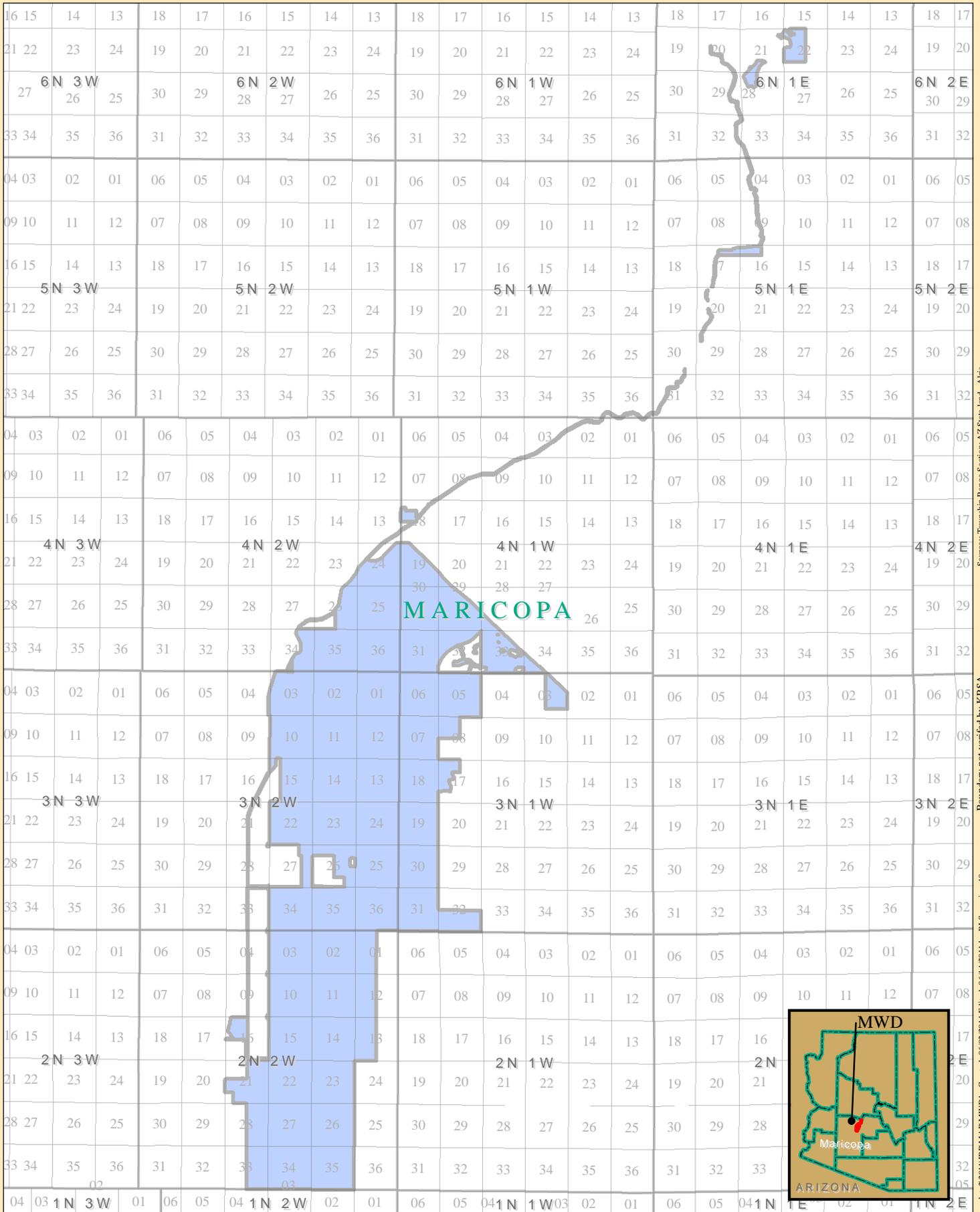
The District has held one public meeting to discuss the development of its IRP.

Prior to the meeting, the District posted notice in advance of the meeting, giving the time and place of the meeting and specifying that the District Board would be considering a draft IRP at the meeting. The notice was posted in accordance with statutory open meeting law requirements. The notice stated that the draft IRP would be available to the public in advance of the meeting and that public comment on the draft IRP would be accepted at the meeting. A copy of the notice is attached as **Appendix D**.

At the meeting, the draft IRP was presented to the Board. After discussion and the opportunity for public comment, the Board authorized the preparation of a final IRP, with such revisions as the Board deemed appropriate. There were no public comments.

1 in = 3 miles

# APPENDIX A -- Map of District Boundary



Sources: Township Range Section: AZ State land - Ahtis  
District Boundary : Data provided by Maricopa  
County Assessor - GIS Dept. - 06/02/2011

Boundary not verified by KRSA

ksasuda2\2011\IRF\M\F\M\W\1 Created: 06/02/2011 Edited: 06/14/2011 by BLS areview 10

## Maricopa County Municipal Water Conservation District Number One



### Legend

- Townships
- County Boundary
- Sections
- District Boundary

**DISCLAIMER:**  
K.R. Salme & Associates PLC  
Does not warrant the accuracy  
or location of the facilities shown



**Maricopa County Municipal Water Conservation District No. 1  
Current Rate Schedules**

	<b>Demand (\$/kW)</b>	<b>Energy (\$/kWh)</b>	<b>Customer (\$/meter)</b>
Resale Rates--Rate 1	\$2.68	\$0.0321	\$16.00
General Service Rate--Rate 2	\$5.09	\$0.0561	\$16.00
P.H. Resale Rate	\$0.00	\$0.0950	\$15.00

**MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE**

*Demand @ Meters (kW)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	8,792	8,284	11,278	11,510	12,897	9,049	9,094	8,724	8,990	8,417	8,965	9,159	12,897
2003	8,896	8,532	11,580	10,591	11,133	7,092	7,836	7,860	8,351	8,885	8,248	8,101	11,580
2004	9,451	9,303	11,545	12,545	13,551	8,113	9,119	9,269	9,485	10,045	9,162	9,126	13,551
2005	10,261	10,032	12,309	10,154	9,337	9,653	10,613	11,009	10,985	11,050	10,706	10,955	12,309
2006	11,441	11,069	12,990	14,540	15,226	12,204	11,900	11,792	12,033	12,154	11,236	11,064	15,226
2007	10,341	10,736	12,843	14,328	13,516	13,234	10,403	11,576	11,847	12,099	10,873	10,873	14,328
2008	11,100	11,250	11,747	12,651	13,043	11,456	10,832	11,303	11,720	11,869	10,768	11,241	13,043
2009	11,764	11,096	12,651	12,099	13,736	14,134	10,722	11,575	11,390	11,406	11,236	10,969	14,134
2010	11,059	11,528	11,852	13,626	11,575	9,281	10,015	9,498	9,528	10,815	10,271	10,759	13,626
2011	10,720	10,130	13,818	13,246	15,754	11,402	10,921	11,468	12,173	13,147	12,059	12,741	15,754

*Demand @ Substation (kW)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	9,546	8,994	12,246	12,498	14,003	9,825	9,874	9,473	9,761	9,139	9,734	9,945	14,003
2003	9,659	9,264	12,573	11,500	12,088	7,700	8,508	8,534	9,067	9,647	8,956	8,796	12,573
2004	10,262	10,101	12,535	13,621	14,714	8,809	9,901	10,064	10,298	10,906	9,948	9,909	14,714
2005	11,141	10,893	13,364	11,025	10,138	10,481	11,523	11,953	11,927	11,998	11,624	11,895	13,364
2006	12,423	12,018	14,104	15,787	16,532	13,251	12,921	12,803	13,065	13,197	12,200	12,013	16,532
2007	11,228	11,657	13,945	15,557	14,675	14,369	11,295	12,569	12,863	13,137	11,806	11,806	15,557
2008	12,052	12,215	12,755	13,736	14,162	12,439	11,761	12,273	12,725	12,887	11,692	12,205	14,162
2009	12,773	12,048	13,736	13,137	14,914	15,346	11,642	12,568	12,367	12,384	12,200	11,910	15,346
2010	12,008	12,517	12,869	14,795	12,568	10,077	10,874	10,313	10,345	11,743	11,152	11,682	14,795
2011	11,640	10,999	15,003	14,382	17,105	12,380	11,858	12,452	13,217	14,275	13,093	13,834	17,105

*Energy @ Meters (kWh)*

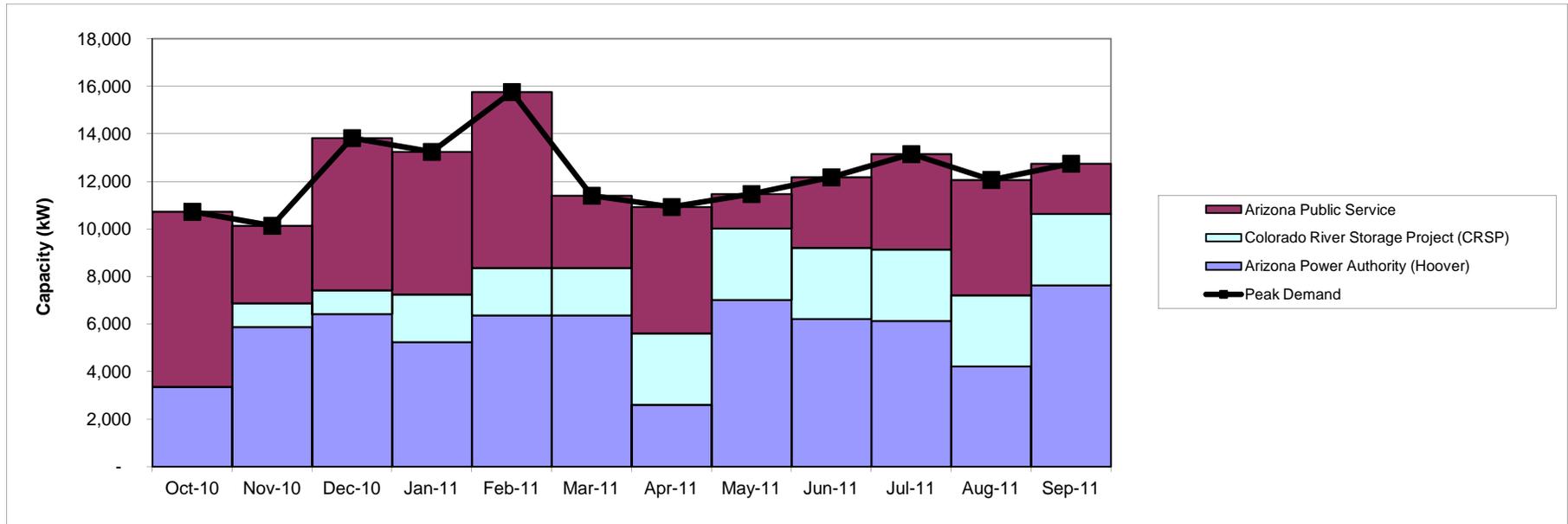
Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	2,592,378	2,279,664	3,762,312	3,919,974	4,197,775	2,671,391	2,888,007	3,105,891	2,780,227	2,790,838	2,756,533	2,556,697	36,301,687
2003	2,834,732	2,385,830	3,600,569	3,615,652	3,281,583	1,062,067	2,272,746	2,257,885	2,737,460	3,256,339	2,460,476	2,407,077	32,172,416
2004	3,145,574	2,671,518	2,925,737	4,864,803	4,478,707	2,082,402	2,527,318	3,195,526	3,387,626	3,600,562	2,801,776	2,766,747	38,448,296
2005	3,350,276	2,602,443	2,995,486	2,217,970	2,198,455	2,372,365	3,446,201	3,430,871	4,085,586	3,882,730	2,933,156	3,499,035	37,014,574
2006	3,799,527	3,558,457	4,206,957	4,881,628	5,817,864	3,173,177	3,751,568	3,998,314	4,570,926	4,477,082	3,767,455	3,576,648	49,579,603
2007	3,415,813	3,409,224	3,782,270	4,962,802	4,961,072	3,824,235	3,390,776	3,941,756	4,799,112	4,854,369	3,315,727	4,099,411	48,756,567
2008	3,692,064	4,131,906	2,979,380	4,014,812	4,444,219	3,150,758	4,249,752	3,828,492	3,949,891	4,581,405	3,689,505	3,915,475	46,627,659
2009	4,286,098	3,600,021	3,485,984	3,383,858	4,182,054	3,839,917	3,669,654	3,841,398	3,874,191	4,490,190	3,716,343	3,767,958	46,137,666
2010	3,766,670	3,531,213	3,328,406	4,897,052	2,728,075	2,263,169	2,733,875	2,777,755	3,421,712	4,371,145	3,059,910	3,337,284	40,216,266
2011	3,373,274	2,787,957	3,864,878	4,120,134	5,600,190	3,110,239	3,369,879	3,637,965	4,257,418	4,877,051	4,332,369	5,036,131	48,367,485

*Energy @ Substation (kWh)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	2,743,257	2,412,343	3,981,283	4,148,121	4,442,090	2,826,869	3,056,092	3,286,657	2,942,039	2,953,268	2,916,966	2,705,499	38,414,484
2003	2,999,716	2,524,688	3,810,126	3,826,087	3,472,575	1,123,880	2,405,022	2,389,296	2,896,783	3,445,861	2,603,678	2,547,171	34,044,883
2004	3,328,650	2,827,003	3,096,018	5,147,940	4,739,372	2,203,600	2,674,411	3,381,509	3,584,789	3,810,119	2,964,842	2,927,775	40,686,028
2005	3,545,266	2,753,908	3,169,826	2,347,058	2,326,407	2,510,439	3,646,774	3,630,551	4,323,371	4,108,709	3,103,869	3,702,683	39,168,861
2006	4,020,663	3,765,563	4,451,806	5,165,744	6,156,470	3,357,859	3,969,913	4,231,020	4,836,959	4,737,653	3,986,725	3,784,813	52,465,188
2007	3,614,617	3,607,644	4,002,402	5,251,642	5,249,812	4,046,810	3,588,123	4,171,170	5,078,425	5,136,898	3,508,706	4,338,001	51,594,250
2008	3,906,946	4,372,387	3,152,783	4,248,478	4,702,877	3,334,135	4,497,092	4,051,314	4,179,779	4,848,048	3,904,238	4,143,360	49,341,437
2009	4,535,553	3,809,546	3,688,872	3,580,802	4,425,454	4,063,404	3,883,232	4,064,971	4,099,673	4,751,524	3,932,638	3,987,257	48,822,926
2010	3,985,894	3,736,733	3,522,123	5,182,066	2,886,852	2,394,888	2,892,989	2,939,423	3,620,859	4,625,550	3,238,000	3,531,517	42,556,894
2011	3,569,602	2,950,219	4,089,818	4,359,930	5,926,127	3,291,258	3,566,010	3,849,698	4,505,204	5,160,901	4,584,517	5,329,239	51,182,523

**MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE**

**SCHEDULED RESOURCES TO COVER TYPICAL PEAK DEMAND**



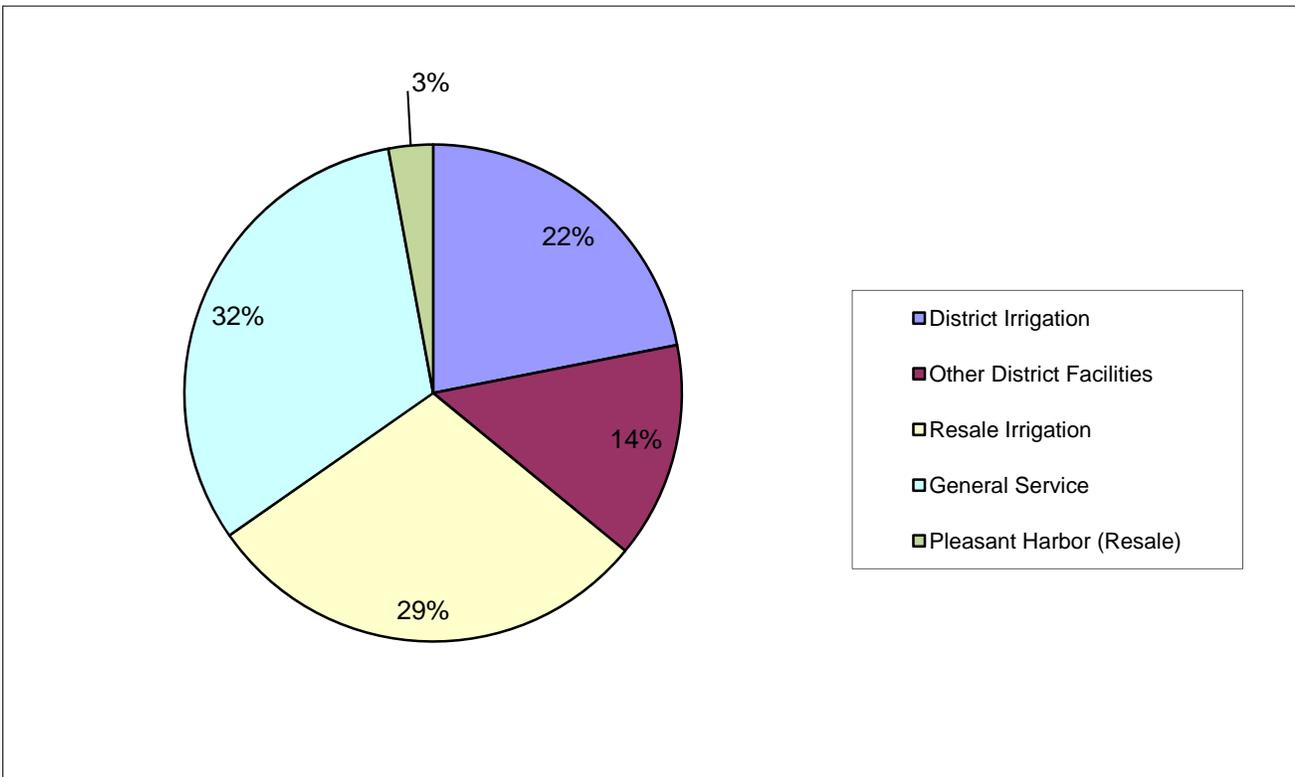
**Resources**

	<u>Oct-10</u>	<u>Nov-10</u>	<u>Dec-10</u>	<u>Jan-11</u>	<u>Feb-11</u>	<u>Mar-11</u>	<u>Apr-11</u>	<u>May-11</u>	<u>Jun-11</u>	<u>Jul-11</u>	<u>Aug-11</u>	<u>Sep-11</u>
<i>Arizona Power Authority (Hoover)</i>	3,360	5,875	6,419	5,242	6,359	6,359	2,604	7,013	6,207	6,132	4,214	7,627
<i>Colorado River Storage Project (CRSP)</i>	-	1,000	1,000	2,000	2,000	2,000	3,000	3,000	3,000	3,000	3,000	3,000
<i>Arizona Public Service</i>	7,360	3,255	6,399	6,004	7,395	3,043	5,317	1,455	2,966	4,015	4,845	2,114
<b>Peak Demand</b>	<b>10,720</b>	<b>10,130</b>	<b>13,818</b>	<b>13,246</b>	<b>15,754</b>	<b>11,402</b>	<b>10,921</b>	<b>11,468</b>	<b>12,173</b>	<b>13,147</b>	<b>12,059</b>	<b>12,741</b>

**MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE**

*Customer Profile*

<b>Customer Type</b>	<b># of Customers</b>
<i>District Irrigation</i>	53
<i>Other District Facilities</i>	34
<i>Resale Irrigation</i>	71
<i>General Service</i>	77
<i>Pleasant Harbor (Resale)</i>	7
<b>Total</b>	<b>242</b>





## PUBLIC NOTICE

Maricopa County Municipal Water Conservation District Number One ("the District") will be holding a board meeting at 9:30 a.m. on November 21, 2011 at 14825 W. Grand Avenue, Surprise, AZ. At that board meeting the District will review and approve its updated Integrated Resource Plan. This Integrated Resource Plan, which is required by the Western Area Power Administration, details the District's power resource plan for the next five years. The final Integrated Resource Plan will be available to the public at the District's office prior to the meeting. Written comments regarding the Integrated Resource Plan will be accepted anytime prior to or at the meeting. Public comments will also be accepted at this time. Please contact James R. Sweeney at 623-546-8266 for more information.



# MARICOPA WATER DISTRICT

## AGENDA

### Special Meeting of November 21, 2011

1. **CALL TO ORDER:** 9:30 a.m.
2. **CANVASS OF ELECTION RETURNS:** The election for Director, Division No. 3 and one Director At Large was held Tuesday, November 15, 2011. The returns of the election are in as certified by the election officials. Board action to canvass the election returns as certified, and to adopt Resolution No. 11-07 providing for the election of Director, Division No. 3 and one Director At Large.
3. **MWD LAND ENTITLEMENT PROJECT:** Report and consideration of project status and marketing. For Board information and action if necessary.
4. **INTEGRATED RESOURCE PLAN:** Review and consideration of MWD's updated Integrated Resource Plan.
5. **2012 O&M BUDGET:** Review and consideration of the draft 2012 O&M Budget including the establishment of:
  - A. 2012 O&M Budget
  - B. 2012 Irrigation Rate
  - C. 2012 Electric Service Rates
  - D. 2012 Surface Water Allocation
  - E. 2012 MWD Assessment Rate
  - F. 2012 Construction Water Rate
6. **CALL TO THE PUBLIC:**
7. **REPORTS AND BOARD COMMENTS:**
8. **EXECUTIVE SESSION:** The Board may vote to hold an executive session for the purpose of obtaining legal advice from the District's attorney on any matter listed on the agenda or discussions with designated representatives regarding negotiations for the sale of real property, pursuant to ARS §38-431.03 (A) (3), (7).
9. **ADJOURNMENT:** Board action to adjourn meeting.