

ORIGINAL



0000096740

327

1 Steve Wene, No. 019630
 2 MOYES SELLERS & SIMS LTD.
 3 1850 N. Central Ave. Ste. 1100
 4 Phoenix, AZ 85004
 5 (602) 604-2141
 6 Attorneys for Wickenburg Ranch Water, LLC

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

8 KRISTIN K. MAYES, CHAIRMAN
 9 GARY PIERCE
 10 PAUL NEWMAN
 11 SANDRA D. KENNEDY
 12 BOB STUMP

Arizona Corporation Commission
DOCKETED

MAY - 6 2009

DOCKETED BY 

14 IN THE MATTER OF THE
 15 APPLICATION OF WICKENBURG
 16 RANCH WATER, LLC, AN ARIZONA
 17 LIMITED LIABILITY COMPANY, FOR A
 18 RATE ADJUSTMENT

Docket No. W-03994A-07-0657

**NOTICE OF FILING OF DIRECT
TESTIMONY AND POTENTIAL
EXHIBITS TO BE USED ON
REHEARING**

19
20 Wickenburg Ranch Water, LLC ("Company"), hereby gives notice that it is filing
21 the direct testimony of the following witnesses:

- 22 • Marvin Glotfelty (Attachment 1);
- 23 • Peter Chan (Attachment 2);
- 24 • William I. Brownlee (Attachment 3);
- 25 • Wendell Pickett (Attachment 4); and
- 26 • Joey Platts (Attachment 5).

27
28
 RECEIVED
 2009 MAY - 6 PM 4:53
 AS ORDERED BY THE
 DOCKET CONTROL

1 The direct testimony of each of these witnesses is being submitted with this notice.
2
3

4 The Company reserves the rights to rely on any testimony or evidence offered
5 during the original proceedings in this matter, copies of which are on file. Additional
6 evidence that the Company may rely upon on rehearing are included as exhibits to
7 witness testimony included herein.
8

9 DATED May 6, 2009.

10 **MOYES SELLERS & SIMS, LTD.**
11

12 
13 _____
14 Steve Wene
15 Attorneys for Wickenburg Ranch Water

16 **Original and thirteen copies**
17 **filed May 6, 2009 with:**

18 Docket Control
19 Arizona Corporation Commission
20 1200 West Washington
21 Phoenix, Arizona 85007
22
23
24
25
26
27
28

ATTACHMENT 1

1 Steve Wene, No. 019630
2 MOYES SELLERS & SIMS LTD.
3 1850 N. Central Ave. Ste. 1100
4 Phoenix, AZ 85004
5 (602) 604-2141
6 Attorneys for Wickenburg Ranch Water, LLC

7
8 **BEFORE THE ARIZONA CORPORATION COMMISSION**

9 **COMMISSIONERS**

10 KRISTIN K. MAYES, CHAIRMAN
11 GARY PIERCE
12 PAUL NEWMAN
13 SANDRA D. KENNEDY
14 BOB STUMP

15 IN THE MATTER OF THE
16 APPLICATION OF WICKENBURG
17 RANCH WATER, LLC, AN ARIZONA
18 LIMITED LIABILITY COMPANY, FOR A
19 RATE ADJUSTMENT

Docket No. W-03994A-07-0657

**DIRECT TESTIMONY OF
MARVIN GLOTFELTY**

20
21 **Q-1 Please state your name and current employment position:**

22 **A-1** Marvin Glotfelty, Principal Hydrogeologist with Clear Creek Associates in
23 Scottsdale, Arizona.
24

25 **Q-2 Describe your educational and professional background:**

26 **A-2** I received a BS degree and MS degree in geology from Northern Arizona
27 University. I am a registered Professional Geologist in both Arizona and
28

1 California, and also a Licensed Well Driller in Arizona. I have been practicing
2 hydrogeological consulting in Arizona for about the past 25 years.

3
4 **Q-3 What is the purpose of your testimony?**

5 **A-3** The purpose of my testimony is to explain the following: (1) discuss certain
6 provisions of the Arizona Department of Water Resources' adequate water supply
7 program and how it relates to the Wickenburg Ranch; (2) explain that there is
8 sufficient water to meet water demands of Wickenburg Ranch; (3) identify the
9 historic and current rainfall patterns at Wickenburg Ranch; (4) explain the impact
10 rainwater catchments will have on downstream water uses; and (5) discuss the
11 applicability and reasons for Arizona Department of Water Resources' Best
12 Management Practices.
13
14

15
16 **Q-4 Describe your experience with the Wickenburg Ranch project.**

17 **A-4** Clear Creek Associates has performed the following tasks: Evaluated the aquifer
18 by conducting pumping tests at on-site wells, prepared Analysis of Adequate
19 Water Supply Application, and prepared the Designation of Adequate Water
20 Supply application.
21

22 **Q-5 Is there sufficient groundwater available to meet all of the Wickenburg**
23 **Ranch Water Company's demand?**

24
25 **A-5** Yes.

26 **Q-6 Explain what it means when a water company is a designated water provider.**

27 **A-6** Being a designated water provider means that ADWR has determined that the
28 Wickenburg Ranch Water Company ("Water Company") has demonstrated that

1 groundwater of adequate quantity and quality is physically, legally, and
2 continuously available to meet projected water demands for 100 years. Water
3 quality will be regulated by ADEQ as a public water system and the water
4 company has also demonstrated the financial capability for the construction of
5 adequate delivery, storage, production, and treatment.
6

7
8 **Q-7 What is the average amount of rainfall in the Wickenburg Ranch area?**

9 **A-7** The average amount of rainfall is 11.07 inches per year. Due to this limited
10 amount of rainfall on each lot, installing rainwater catchment systems is not cost
11 effective for individual homeowners.
12

13 **Q-8 How much rainfall do you estimate that all of the rainwater catchments**
14 **would capture during an average year?**

15 **A-8** Assuming 6,519,255 square feet of rooftops and that the catchments collected just
16 stormwater off rooftops, at full build-out, the catchments would capture 138 acre-
17 feet per year. This estimate may change if the assumptions about the project
18 development, catchment area, and capacity of the catchment systems are not
19 realized, but it is a reasonable estimate based upon current information.
20
21

22 **Q-9 What would be the impact if this rainwater is captured and retained on the**
23 **project?**

24 **A-9** The critical impact would be downstream. If left alone, most of the rainfall would
25 run off the Wickenburg Ranch lots, flow across open spaces and be channeled into
26 downstream riparian washes where it would be consumed by vegetation, wildlife,
27 or pond in the wetlands downstream of the Town of Wickenburg. If you take this
28

1 water out of the system, the riparian habitat and wildlife that depends on the water
2 will suffer adversely. This adverse impact would be most pronounced during
3 drought conditions, when the riparian plant and animal life and wetlands need this
4 stormwater the most. Similarly, downstream water right holders would be
5 adversely impacted under the prior appropriation system.
6

7
8 **Q-10 Under the current applicable rules, are the best management practices**
9 **applicable to the Wickenburg Ranch development?**

10 **A-10** No. The best management practices by rule are limited geographically to inside
11 Active Management Areas, and Wickenburg Ranch is located outside the Active
12 Management Areas. See Exhibit A (incorporated herein and may be used as
13 evidence).
14

15
16 **Q-11 Based on your experience, do you believe rainwater catchments, xeriscaping**
17 **and best management practices are necessary for the water company to provide safe**
18 **and reliable potable water service?**

19 **A-11** No. The Water Company has established that there is sufficient groundwater
20 available to meet the potable water demands at Wickenburg Ranch.
21

22 **Q-12 Does that conclude your testimony?**

23 **A-12** Yes.
24
25
26
27
28

EXHIBIT A

ARIZONA DEPARTMENT OF WATER RESOURCES
Modified Non-Per Capita Conservation Program (Modified NPCCP)

Frequently Asked Questions (FAQs)

What is the Modified NPCCP?

The Modified NPCCP is a new regulatory program added to the Third Management Plan (TMP) for Arizona's Active Management Areas (AMAs). It is a performance-based program that requires participating providers to implement water conservation measures that result in water use efficiency in their services areas. Providers must implement a Public Education Program and one or more additional Best Management Practices (BMPs) based on their total number of residential and non-residential water service connections.

- Up to 5000 connections - 1 BMP
- 5001 – 30,000 connections - 5 BMPs
- 30,001 or more connections - 10 BMPs

Who Participates in the Modified NPCCP?

Required: All large municipal providers (cities, towns and private water companies serving more than 250 acre-feet per year) that do not have a Designation of Assured Water Supply (DAWS) and that are not regulated as a large untreated water provider or an institutional provider are required to participate.

Optional: Participation is optional for large providers that have a DAWS. During the TMP, these providers have the following options:

1. If currently in GPCD Program, they may continue in that program or switch to the Modified NPCCP or Alternative Conservation Program (ACP).
2. If currently in the NPCCP, they may continue in that program or switch to the Modified NPCCP, GPCD, or the ACP.
3. If currently in the ACP they must remain in that program until the Fourth Management Plan.

After the adoption of the Fourth Management Plan, large providers with a DAWS will have only two options: the GPCD program or the Modified NPCCP.

What is Required to Participate in the Modified NPCCP?

- A Provider Profile must be submitted.
- The required Public Education Program must be implemented.
- The appropriate number of BMPs (based on number of connections) must be implemented.
- All connections (100%) must be metered.
- Providers must submit a Conservation Efforts Report along with their Annual Water Withdrawal and Use Report.
- Records must be retained records for five years.

What is the Provider Profile?

The Profile assists providers in an assessment of their water service areas for the purpose of choosing relevant BMPs with a high potential for improving water use efficiencies. It must be submitted to enter the program and will be reviewed by the department to see if the requirements have been met. The following information is requested on the Profile:

- Service area characteristics and water use patterns.
- The Public Education Program that will be implemented.

- The additional BMPs that will be implemented.
- A justification of how each BMP is relevant to the provider's service area characteristics and/or water use patterns.
- Whether the metering requirements are met.
- Conservation measures currently being implemented.
- The providers' current rate structure

Note: If a provider's total number of service connections increases to a higher tier level after the Profile has been approved, the provider must submit a new Profile within 60 days after the provider becomes aware of the increase. Otherwise, Profiles are to be submitted every three years.

What is the Timeline for Submitting Provider Profiles and Conservation Efforts Reports?

For Providers that are Required to Participate in the Modified NPCCP:

Provider Profiles must be submitted by July 1, 2009 and the program must be in place by January 1, 2010 or the date the Profile is approved, whichever is later. A new large provider without a DAWS that is noticed by the Department must submit a Profile within six months of the notice date, and must begin complying on the date the Profile is approved.

The Department will make a determination on the Profile within 90 days of submittal. If disapproved, a provider must correct and submit the revised Profile within 90 days after receiving the notice, or if the provider appealed the Department's decision, within 90 days after the decision is final. If the revised Profile is late or the revision is not approved, the provider is out of compliance until it submits a Profile that is approved. If the Department does not contact a provider within 90 days after the submittal date, the Profile will automatically be approved.

For Providers with a DAWS that Choose to Participate in the Modified NPCCP:

If a provider with a DAWS submits a Provider Profile, the provider will remain in its current program until the Profile is approved. The approval process is the same as that described in the preceding section, except that if a Profile is not approved, the provider may either submit a revised Profile or stay in its existing conservation program.

What is the Required Public Education Program?

The provider must complete the following requirements:

- Communicate to its customers a minimum of twice per year the importance of water conservation, the types of water conservation information they have available and how the information can be obtained.
- Provide customers with free written water conservation information upon request. The information must be available in the provider's office.

What are the Best Management Practices (BMPs)?

The BMPs are conservation measures that were identified during the stakeholder process and are included in the Second Modification to the Third Management Plan, 2008. There are 53 BMPs in the following seven categories:

1. Public Awareness/Public Relations
2. Conservation Education and Training
3. Outreach Services
4. Physical System Evaluation and Improvement

5. Ordinances/Conditions of Service/Tariffs
6. Rebates/Incentives
7. Research/Innovation Program

A complete listing of the BMPs can be found in either of the following documents:

- Modified NPCCP Guidance Document attachment: "Required Public Education Program and BMPs in the Modified NPCCP".
- Appendix of the May 2008 Modifications to Chapter 5, Municipal Conservation Program, Third Management Plan.

The Guidance Document will be posted on the Department website when available. For the Modifications, go to: www.azwater.gov, select "Laws, Rules, Subst. Policy" from the left menu, and select "Modification Language" from the AMA of choice; or go to:

http://www.azwater.gov/dwr/Content/Find_by_Category/Laws_and_Rules/default.htm

How are the Best Management Practices (BMPs) Selected and Approved?

Providers must select their BMPs from the Modified NPCCP list. The BMPs selected must be reasonably relevant to their individual service area characteristics or water use patterns. The expectation is that BMPs should lead to increased water use efficiency. The basis for selection may vary from one provider to another. For a BMP to be relevant to a service area, one or more of the following indicators should apply:

- The BMP is applicable to the majority or a large portion of customers.
- The BMP is directed toward a provider's highest water users or water use categories.
- Customers in the service area are able to take advantage of the BMP.
- The BMP is implemented to improve a provider's existing water conservation effort.
- The BMP is implemented to reduce or eliminate excessive water use or water waste.

Credit for a BMP will be given if it:

- Is included on the Modified NPCCP list.
- Is relevant to its service area and/or water use patterns.
- Has led to or may lead to improved water use efficiencies in the provider's service area.
- Provides staff time and/or funds for its implementation.

Can BMPs be Substituted or Changed?

A BMP can be discontinued and a new one substituted any time during the year, however, the following conditions apply:

- The substitute BMP must be on the Modified NPCCP BMP list.
- The provider must determine that the substitute BMP is reasonably relevant to its existing service area characteristics or water use patterns as identified in its Profile.
- The provider must explain the reason for the substitution in its next Conservation Efforts Report.

A provider may apply to the Director to add a new or different BMP to the list. If approved, the list of BMPs will be modified and posted on the Department's web site and be on file at each AMA office.

What is the Conservation Efforts Report?

The Conservation Efforts Report is used to determine compliance with the Program and serves as a tool for the provider to review and plan for improvements. It includes the following components:

ARIZONA DEPARTMENT OF WATER RESOURCES

- A description of the Public Education Program and BMPs implemented during the previous calendar year.
- The results of the activities implemented.
- An assessment of the efforts made.
- Plans for the current year's conservation efforts.
- A copy of the provider's current rate structure, unless no changes have been made to the rate structure since it was last submitted to the Department.

The Conservation Efforts Report is submitted along with the provider's Annual Water Withdrawal and Use Report on or before March 31 and covers the activities for the previous calendar year. The Department will approve or disapprove a Conservation Efforts Report within 90 days after the deadline of March 31 or the receipt of the Annual Water Withdrawal and Use Report.

How will the Program be Evaluated?

The Department is committed to ongoing program improvement by assessing the success of specific BMPs and the overall effectiveness of the program. The Municipal BMP Advisory Committee will assist in program evaluation activities, and/or be assisted by an independent evaluator. GPCD will be tracked for each large provider and for each AMA. GPCD values will not be used as a compliance point. However, water use trends may be used to evaluate the effectiveness of some BMPs and will be used to evaluate the overall effectiveness of the Modified NPCCP.

Where Can I Get Assistance?

Department staff is available to help providers with their planning activities, reports, and BMP substitutions and to provide resources. Staff has prepared a Guidance Document that includes program requirements, instructions and suggestions for completing the documentation, BMP lists, and the forms which will be available on the Department's website. The Conservation Efforts Reports may be posted on the Department's website as a resource for providers and The Department's "Summary of Water Conservation Programs in AMA" will be updated on a regular basis based on information contained in the Conservation Efforts Reports.

Active Management Area Contacts

Phoenix AMA

Ruth Greenhouse (602) 771-8608
rgreenhouse@azwater.gov
Sandra House, (602) 771-8613
slhouse@azwater.gov
3550 North Central Avenue
Phoenix, AZ 85012

Prescott AMA

Gordon Wahl (928) 442-1503
gcwahl@azwater.gov
2200 East Hillside Road
Prescott, AZ 86301-4941

Tucson AMA

Mary Bauer (520) 770-3800
mcbauer@azwater.gov
400 West Congress, Ste 518
Tucson, AZ 85701-1374

Pinal AMA

Patty Smith (520) 836-4857
pasmith@azwater.gov
1729 NorthTrekell Road, Suite 105
Casa Grande, AZ 85222-1743

Santa Cruz AMA

Nick Kilb (520) 770-3802
ndkilb@azwater.gov
857 West Bell Road, Ste 3
Nogales, AZ 85621-4545

ARIZONA DEPARTMENT OF WATER RESOURCES

**Required Public Education Program and BMPs
in the Modified NPCCP**

Adapted from

May 2008 Modifications to Chapter 5
Municipal Conservation Program Third Management Plan
Appendix 5 –N. Water Conservation Measures

I. Public Education Program

A large municipal provider regulated under the Modified Non-Per Capita Conservation Program (Modified NPCCP) shall implement a public education program that includes the following components:

- **Communicate at least twice a year:** At least twice a year, the provider shall communicate to customers the importance of water conservation and inform them of the water conservation information available from the provider and how to obtain the information. Communication channels shall include one or more of the following: water bill inserts, messages on water bills, provider web page, post cards, newsletters or print pieces. Providers who do not have websites or conservation information on their website are encouraged to develop websites with conservation information.
- **Provide free written information:** The provider shall provide customers with free written information on water conservation (i.e., pamphlets, brochures). The information shall be available in the provider's office and the provider shall send information to customers on request. The provider is encouraged to distribute water conservation information at other locations as well.

II. Additional Best Management Practices (BMPs)

Large municipal providers regulated under the Modified NPCCP must select from the following list of additional BMPs to comply with the program. The Director may modify the list to include additional BMPs pursuant to the procedure set forth at the end of this appendix. A copy of the most recent the list of additional BMPs shall be posted on the department's web site and shall be on file in the Active Management Area offices.

CATEGORY 1: PUBLIC AWARENESS/PUBLIC RELATIONS

Programs in this category are designed to provide water users information on the need for and importance of water conservation, as well as information on the conservation services available to them. The following programs qualify in this category:

(1.1) Local and/or Regional Messaging Program

The water provider actively participates in a water conservation campaign with local or regional advertising. The campaign must promote ways for citizens to save water. Methods to promote a campaign may include media such as television and radio commercials, web sites, and utilization of promotional materials such as brochures (Spanish and English), vehicle signs (busses, garbage trucks, etc.), bookmarks, magnets, etc.

(1.2) Special Events/Programs and Community Presentations

At educational or promotional events, water conservation information is displayed and made available and/or presentations are given. Events may include home and garden shows, art shows, community celebrations, environmental shows, etc. To receive full credit for this measure, a provider must attend and staff at least three events per year.

(1.3) Market Surveys to Identify Information Needs/Assess Success of Messages

The water provider surveys customers to gather data regarding information needs, program preferences and/or response to conservation messages. Prior to designing a survey, the provider must set objectives for the survey and identify systematic methods for data collection, analysis, and communication of results. Survey results will be used to improve current water conservation activities and/or to plan future activities. This measure will be effective for only one year. In subsequent years, the provider must replace this measure with another BMP from categories 1 through 7 of this section. The new BMP must be appropriate for the provider's service area as reflected in the provider's approved Provider Profile.

CATEGORY 2: CONSERVATION EDUCATION AND TRAINING

Programs in this category are designed to assist users to better understand how to conserve water by providing written information and/or training in water conservation tools and techniques. The following programs qualify under this category:

(2.1) Adult Education and Training Programs

The water provider implements an adult education and/or training program. The program must include a combination of efforts to provide adults within the provider's service area with hands-on training. This may include, but is not limited to, regularly scheduled workshops for homeowners, a speaker's bureau, and/or training programs for landscape professionals. Programs can be targeted toward homeowners, landscape professionals, and/or non-residential users. A provider that implements multiple adult programs/efforts may be eligible to receive credit for more than one BMP if the programs/efforts can be shown to be separate and distinct from one another (i.e., a provider that maintains an active speakers bureau and offers a workshop series is eligible to receive credit for two BMPs).

(2.2) Youth Conservation Education Program

The water provider works with schools in its service area to increase students' understanding of water resources and to promote water conservation. The program may include, but is not limited to, a combination of providing instructional assistance, education materials, teacher education, classroom presentations, and field trips to water related facilities. A provider that implements multiple youth programs may be eligible to receive credit for more than one BMP if the programs can be shown to be separate and distinct from one another (i.e., a provider that offers free water conservation school assemblies with accompanying printed materials for elementary school students and also distributes a middle school student activity book and teacher guide is eligible to receive credit for two BMPs).

(2.3) New Homeowner Landscape Information

The water provider makes low water use landscape information packets available to all new owners of newly constructed homes, either through direct distribution (mail or delivery) or through delivery by the home builder. The provider also notifies new owners of existing homes (resale) that information on low water use landscaping is available and must provide such information on request. The number of notifications sent and packets mailed must be recorded and noted in the provider's conservation efforts report.

(2.4) Xeriscape Demonstration Garden

The water provider installs and maintains a water efficient demonstration garden. The garden must be available to the public and include interpretive signage and/or literature about low water use plants and/or water efficient landscape techniques.

(2.5) Distribution Plan for Water Conservation Materials

The water provider develops, maintains and utilizes a written distribution plan for marketing water conservation materials and programs. The plan must include the marketing channels that are available to promote water conservation programs and how those channels will be used. Communication modes used to promote water conservation programs may include water bill inserts, city cable, on-hold messages, e-mail messages, public events, water conservation workshops, water conservation web sites, and local publications. Distribution outlets for water conservation materials must be noted and may consist of partnerships with libraries, businesses (i.e., landscape architects, nurseries, realtors) or other related organizations (i.e., master gardeners). The plan must contain: (1) goals and objectives for distribution of materials over a two-year period, beginning the year following plan development; (2) a timetable for distribution; and (3) a mechanism for tracking distribution of materials. This measure will be effective for only one year. In subsequent years, the provider must replace this measure with another BMP from categories 1 through 7. The new BMP must be appropriate for the provider's service area as reflected in the provider's approved Provider Profile

CATEGORY 3: OUTREACH SERVICES

Programs in this category are designed to provide users with consultations, audits and/or retrofit information designed to improve water use efficiency. The following programs qualify in this category:

(3.1) Residential Audit Program

The water provider implements an audit program for residential customers. The audit can be self-audit (provider offers self-audit kits) or be conducted by the provider or its designated representative. Audits may include indoor and/or outdoor components, but must include a meter check. An audit may include, but would not be limited to, irrigation system, pool, water feature, toilets, faucets, and shower checks. The audit program must be offered to all homes within a provider's service area.

(3.2) Landscape Consultations (Residential and/or Non-residential)

The water provider or a designated representative offers landscape consultation services to residential and non-residential customers. The provider implementing this measure must focus on those portions of its service area with the greatest potential for savings. Services would include evaluation of irrigation system, controller programming/irrigation

scheduling and plant selection/turf conversion possibilities. A meter check also could be included. The individual providing the consultation must provide either on-site written suggestions or on-site verbal suggestions with written follow-up. Other related programs (i.e., rebates for turf removal/converting to xeriscape) could be offered during the consultation.

(3.3) Water Budgeting Program

The provider offers assistance to one or more non-residential water user groups (such as homeowner associations, industry, commercial properties, government facilities or parks) in developing monthly and/or annual water use target amounts for outdoor and/or indoor water use that reflect highly water efficient water use/application rates. These rates should meet or exceed water use efficiencies required for similar uses in the Department's Third Management Plan. If they are not addressed in the Plan, water use rates should be commensurate with state of the art water efficiency standards found elsewhere in the body of water conservation literature.

(3.4) Residential Interior Retrofit Programs

The water provider provides free or low cost plumbing fixtures and/or fixture retrofits, such as faucets, faucet aerators, low flow showerheads, toilets and toilet dams, to residential customers living in homes built prior to the adoption of the 1990 Uniform Plumbing Code requiring low flow plumbing fixtures. The provider must offer the fixtures/fixture retrofits to all residential customers meeting the above criteria unless the provider can demonstrate that targeting certain portions of its water service area is likely to yield the highest participation and/or potential water savings. The provider must select appropriate communication channels to advertise the program.

(3.5) Non-residential Interior Retrofit Programs

The water provider provides free or low cost plumbing fixtures and/or fixture retrofits, such as faucets, faucet aerators, low flow showerheads, toilets, urinals, and toilet dams, to non-residential customers with facilities built prior to the adoption of the 1990 Uniform Plumbing Code requiring low flow plumbing fixtures. The provider must offer the fixtures/fixture retrofits to all non-residential customers meeting the above criteria unless the provider can demonstrate that targeting certain portions of its water service area is likely to yield the highest participation and/or potential water savings. The provider must select appropriate communication channels to advertise the program.

(3.6) Customer High Water-Use Inquiry Resolution

The water provider assigns a designee(s) to assist citizens with their high water-use complaints. The program includes a site inspection to discover the cause of an increase in the water bill. To receive credit for this measure, the provider must follow up in some way on every customer inquiry and keep a record of inquiries and follow-up activities.

(3.7) Customer High Water Use Notification

The water provider monitors customers for high water use. To receive credit for this measure, the provider must contact the high water use customers via telephone, by email, by mail or in person. The notification must include information on provider services that could benefit the customer, such as audit programs, publications, and rebate programs.

The type of notification and the criteria used for determining which customers are notified must be recorded.

(3.8) Water Waste Investigations and Information

The water provider assigns a designee(s) to assist citizens with water waste complaints. A complaint investigation would typically include a site inspection and some type of follow-up action, such as education of the customer to prevent water waste or a letter of enforcement if applicable. To receive credit for this measure, the provider must follow up in some way on every water waste complaint and keep a record of complaints and follow-up activities.

CATEGORY 4: PHYSICAL SYSTEM EVALUATION AND IMPROVEMENT

These programs ensure that the water system is running at optimal efficiency (maintenance) or to improve water use efficiency in the physical water system by making one or more physical system improvements. The following programs qualify in this category:

(4.1) Leak Detection Program

The water provider implements a systematic evaluation of its water distribution system to identify and fix leaks. The provider must implement this program throughout its service area unless the provider can demonstrate that targeting certain portions of their water service area is likely to yield the highest potential water savings.

(4.2) Meter Repair and/or Replacement Program

The water provider implements a program to systematically assess the meters in its water service area to identify under-registering meters and to repair or replace them.

(4.3) Comprehensive Water System Audit Program

The water provider conducts a systematic audit of its water distribution system, systems control equipment, and water records to identify and quantify water losses. The audit must include an analysis of results that includes plans for corrective measures and can be a precursor to a leak detection and/or meter repair/replacement program. This BMP will be effective for only one year (unless the provider can offer justification for an ongoing or multi-year program). In subsequent years, the provider must replace this measure with another BMP from this list of additional BMPs to continue to meet its Modified NPCCP requirements.

CATEGORY 5: ORDINANCES / CONDITIONS OF SERVICE/TARIFFS

Programs in this category are designed to reduce water use within the service area and/or increase water use efficiency by limiting or reducing water used for specific purposes. Ordinances would apply to cities and towns and tariffs would apply to ACC regulated municipal providers (private water companies). A water provider that is not directly part of a municipality can get credit if it works with local or county jurisdictions to implement a new ordinance. Each ordinance/tariff/condition of service selected from the list below will be counted as one BMP.

(5.1) Low Water Use Landscaping Requirements for Residential, Multi-family, Non-residential, and/or Common Areas.

(5.2) *Water Tampering / Water Waste Ordinances*

(5.3) *Plumbing Code Requirements*-- if they are more restrictive than the 1990 Uniform Plumbing Code or its equivalent

(5.4) *Limitations on Water Features (fountains, waterfalls, ponds, water courses and other artificial water structures) and/or Water Intensive Landscaping and Turf*

(5.5) *Ordinance for Model Homes in New Residential Developments*

Landscaping at model homes in new residential developments is required to be water efficient. Water-intensive landscaping is limited to functional areas and/or limited in size.

(5.6) *Graywater Ordinances* -- required onsite graywater/water harvesting features at residences and/or businesses

(5.7) *Requirements for Car Wash Water Recycling*

(5.8) *Landscape Watering Restrictions (time of day, etc.)*

(5.9) *Requirements for Hot Water Recirculation Devices for Residential, Multi-family, and/or Non-residential Sectors*

(5.10) *Retrofit on Resale*

As an ordinance or as a condition of service, the owner of a single-family home, a multi-family home complex, and/or a non-residential facility is required to replace all plumbing fixtures inside the housing unit/commercial unit that do not conform to current low water using standards. This could be done by the seller prior to sale or by the buyer subsequent to the sale. Retrofits would include replacement of toilets, showerheads, and faucets

(5.11) *Landscape Water Use Efficiency Standards for Non-residential Users*

(5.12) *Conservation Tariff (private water companies)*

(5.13) *Requiring a Water Use Plan*

A plan is to be submitted by all new commercial, industrial, and institutional users with a projected annual water use requirement of ten acre-feet or more per year. The water use plan must identify all water uses anticipated by the user, and the water efficiency measures associated with the uses. The water use plan must include at least three of the following:

- a. Statement of water efficiency policy.
- b. Water conservation education/training for employees.
- c. Identification of on-site recycling and reuse strategies.
- d. Total cooling capacity and operating TDS or conductivity for cooling towers.
- e. Identification of best available technologies used for process, cooling, and domestic water uses.
- f. Landscape watering system distribution uniformity and landscape water budget.
- g. Total annual water budget for the facility.

CATEGORY 6: REBATES/INCENTIVES

Programs in this category are designed to provide users with an incentive for implementing a water conservation practice. Program can include rebates or incentives such as fee reductions and/or waivers. The following programs qualify in this category:

A. INCENTIVES (INDOORS)

(6.1) Toilet Rebate Program

The water provider offers a financial rebate or incentive to all owners of residential and/or multi-family homes in the provider's service area that were constructed prior to adoption of the 1990 Uniform Plumbing Code for the replacement of high water use toilets with a ULF toilet.

(6.2) High Efficiency Flush Toilet Rebate Program

The water provider offers a financial rebate or incentive to all owners of residential and/or multi-family homes in its service area to replace a high use toilet with an hef toilet.

(6.3) Toilet Replacement Program

The water provider implements a program to replace high use toilets with ULF or HEF toilets in residential and/or multi-family homes in the provider's service area.

(6.4) Indoor Water Fixture Replacement/Rebate/Incentive Program

The water provider implements a program to retrofit indoor water fixtures, including showerheads, aerators and toilet flappers, in all homes and multi-family homes within its service area constructed prior to adoption of the 1990 Uniform Plumbing Code. The provider shall offer to replace the fixtures or shall offer a financial rebate or incentive for homeowners to replace the fixtures.

(6.5) Rebate for Hot Water Recirculating Systems/Instant Hot Water Systems

The water provider shall offer a financial rebate or incentive to residential, multi-family, and/or non-residential customers to install hot water recirculation devices or devices that provide instant hot water at the point of use.

(6.6) Water Efficient Appliance Rebate/Incentive Program

The water provider shall offer to customers a financial rebate or incentive for the acquisition of water efficient appliances.

B. INCENTIVES (OUTDOOR)

(6.7) Graywater Retrofit Rebate/Incentive

The water provider shall offer customers a financial rebate or incentive for the retrofit of an onsite graywater feature, along with education on how to retrofit and the benefits of using graywater onsite.

(6.8) Water Harvesting Retrofit Rebate/Incentive

The water provider shall offer customers a financial rebate or incentive for the installation of water harvesting features that may include gutters, downspouts, landscape designs, and containers, along with information about water harvesting techniques.

(6.9) Landscape Conversion Rebate/Incentive

The water provider shall offer customers a financial rebate or incentive for the conversion of landscape to reduce the overall outdoor water usage. This would most likely involve replacing turf with a xeriscape landscape. Information about landscape conversions must be provided to customers.

(6.10) Rebate/Incentive for Installing Xeriscapes in New Landscapes

The water provider offers customers with new landscapes a financial rebate or incentive for installing a xeriscape landscape.

C. NON-RESIDENTIAL

(6.11) Commercial and Industrial program

The water provider identifies commercial and industrial customers with the highest conservation potential and implements a water conservation program for those customers. The program may include toilet rebates or replacements, audits, incentives and grants.

(6.12) Large Landscape Conservation Program

The water provider implements a program to provide non-residential customers with support and incentives to improve their landscape water use efficiency.

(6.13) No/low interest loans for implementing BMPs

The water provider offers assistance to customers wishing to invest in projects intended to reduce existing water use or bring new uses in at high rates of efficiency.

CATEGORY 7: RESEARCH/INNOVATION PROGRAM

Programs in this category are designed to encourage water providers to conduct systematic evaluations of conservation measures already implemented, to implement state of the art water conservation technologies and techniques, and/or to develop and/or try new technologies and techniques. The following programs qualify in this category:

(7.1) Implementation of an Emerging Technology

To receive credit for this measure, the provider must submit with its Conservation Efforts Report documentation that includes a description of the technology, any available information on water savings, a description of how the technology was implemented within the provider's service area and a description of the results. This documentation shall also be made available for public distribution.

(7.2) Initiating Applied Research -- to enhance program decision making or provide financial support or in-kind services for such projects

To receive credit for this measure, a provider must describe its involvement/participation and method(s) of support. Upon completion of the research, the provider shall submit documentation of the analysis and results with its Conservation Efforts Report. This documentation shall also be made available for public distribution.

(7.3) Evaluation of New and Emerging Technologies and Practices

To receive credit for this measure, the provider must submit documentation with its Conservation Efforts Report stating the objectives of the evaluation, methods used to conduct the evaluation, and results of the investigation. This documentation shall be made available for public distribution.

(7.4) *Conducting a Quantitative Analysis* -- of a conservation measure that yields results regarding actual water savings

To receive credit for this measure, the provider must submit documentation with its Conservation Efforts Report stating the methods used to conduct the analysis and the results of the investigation. This documentation shall be made available for public distribution.

(7.5) *Implementation of Smart Irrigation Technology*

To receive credit for this measure, the provider must briefly describe the project location, implementation methods, and estimates of irrigation efficiency or water savings, if and when available, and submit the information with its conservation efforts report.

(7.6) *Development of Industry Partnerships* to encourage and implement collaborative efforts and activities designed to save water. To receive credit for this measure, a provider must describe the partnership, its objectives, its ongoing efforts and any efforts planned for the future, and submit the information in its Conservation Efforts Report.

(7.7) *Providing Financial Support or In-kind Services for Development of New Conservation Technologies and Products*

To receive credit for this measure, the provider must describe its involvement/participation and method(s) of support. Upon completion of the research, the provider must submit documentation of the analysis and results with its Conservation Efforts Report.

(7.8) *Piloting a New Initiative, Project or Program*

To receive credit for this measure, the provider must submit documentation with its Conservation Efforts Report that includes a description of the project/program, a description of how the project/program was implemented within the provider's service area, and a description of the results.

PROCEDURE FOR ADDING A BMP TO THE LIST OF ADDITIONAL BMPs

1. A large municipal provider may apply to the director to add a BMP to the list of additional BMPs set forth in this appendix.
2. Upon receipt of an application submitted pursuant to paragraph 1 above, the Director shall review the application and may request additional information from the applicant and may seek information from other sources as may be necessary to determine whether the BMP should be added to the list.
3. If the Director approves the application, the Director shall add the BMP to the list of additional BMPs set forth in this appendix. The Director shall post the modified list of additional BMPs on the Department's web site and shall file the modified list within the Active Management Area offices.

Modified Non-Per Capita Conservation Program Background and Rationale for Program Development

Introduction

In April 2007, legislation was passed to add a new regulatory program, the Modified Non-Per Capita Conservation Program (Modified NPCCP), to the Arizona Department of Water Resources (Department) Third Management Plan for Active Management Areas (AMAs). The Third Management Plan was successfully modified to include the Modified NPCCP on April 1, 2008, and the modifications became effective May 20, 2008. The Transcript of Hearing, Order of Adoption, and Modifications for each AMA can be found on the Department's website, in the section Laws, Rules, and Substantive policy statements¹.

The Modified NPCCP, addresses large municipal water providers (cities, towns and private water companies serving more than 250 acre-feet per year) and was developed in conjunction with stakeholders from all AMAs. Participation in the program is required for all large municipal water providers that do not have a Designation of Assured Water Supply and that are not regulated as a large untreated water provider or an institutional provider.

The Modified NPCCP is a performance-based program that requires participating providers to implement water conservation measures that result in water use efficiency in their services areas. A water provider regulated under the program must implement a required Public Education Program and choose one or more additional Best Management Practices (BMPs) based on its size, as defined by its total number of water service connections. The provider must select the additional BMPs from the list included in the Modified NPCCP Program.

History

Since the inception of municipal conservation requirements in the Department's management plans, public and private water utilities in the AMAs have been regulated largely in the same manner through the Total Gallons Per Capita Per Day (GPCD) Program. Private utilities, as well as some municipalities, have claimed that regulation under the Total GPCD Program restricts their ability to serve increasing non-residential water uses. While alternative municipal conservation programs that address this issue exist, private water companies have maintained that enrollment requirements for these programs would require significant additional expense, with no guarantee that the Arizona Corporation Commission (ACC) would allow them to recover the costs through increased

¹ [http://www.azwater.gov/dwr/Content/Find by Category/Laws and Rules/default.htm](http://www.azwater.gov/dwr/Content/Find%20by%20Category/Laws%20and%20Rules/default.htm)

rates. Several years of internal consideration and discussion, as well as litigation brought by private water companies challenging the municipal conservation program, eventually resolved some of the issues raised by the utilities.

Review & Stakeholder Process

In early 2005, the Department made the commitment to conduct a formal review of the municipal conservation program for large municipal providers in AMAs and assigned staff to organize and facilitate the review. Interviews were held with AMA Directors and other Department staff who had direct experience with the development and/or implementation of the municipal program. Additional interviews were held with twenty-two water providers in the Phoenix, Tucson, Pinal and Prescott AMAs, as well as staff from the Arizona Corporation Commission to introduce the review process, to request feedback on the existing regulatory program, and to ask for ideas regarding additional options that may be considered during the review process. A detailed summary of the comments and suggestions offered during these meetings can be found on the Department's website in the report, *Evaluation of the Third Management Plan Program for Large Municipal Water Providers in Active Management Areas: Summary of Interviews and Framework for the Stakeholder Process*.

Department staff and municipal water provider representatives reached a general consensus to continue the review process to consider the possibility of developing an alternative to the municipal provider regulatory programs then in existence. Those who were interviewed, including Department staff and water providers, suggested the following general approaches: (1) a program for municipal water providers to develop and implement a water conservation plan, (2) a prescribed conservation program, or BMP program, whereby all municipal providers would implement a basic set of water conservation measures, then choose additional measures to correspond with their service area characteristics, and (3) a modified Alternative Conservation Program (ACP), which would be similar to the ACP currently available pursuant to the Third Management Plan but with the requirement to obtain a Designation of Assured Water Supply instead of being assigned groundwater limitations.

Department staff met with a stakeholder group comprised of staff from regulated water providers, the ACC, the Department of the Interior, the Central Arizona Project (CAP) and other interested parties to review and discuss the municipal conservation requirements of the Third Management Plans. The intended outcome of this process was to develop a municipal conservation program that fosters water use efficiency and a long-term culture of conservation within the five AMAs of the state that can be effectively implemented by the Department, and that addresses concerns expressed by private water companies.

The formal stakeholder process was initiated in February 2006 to present information gathered to date and to present the possible options for a new municipal conservation program identified during the informal information gathering process. All large municipal water providers in all AMAs were invited to participate in the process. Stakeholder meetings were held throughout the year. Early in the process, stakeholders expressed their preference for developing a BMP program. The remainder of the stakeholder process was dedicated to this objective. Also during that time, a BMP subcommittee, comprised of volunteers from the larger stakeholder group, met to refine the general listing of BMPs

generated by the stakeholder group, prepare definitions for some of the BMPs and discuss possible components of a program framework. Through this stakeholder process, a general consensus was reached on the program framework and the list of BMPs.

Legislation

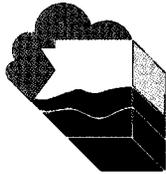
During the fall and winter of 2006, Department staff prepared draft legislation to enable implementation of the program. Rather than adding language specifying an additional municipal conservation program, the draft legislation proposed modifying the existing Non-Per Capita Conservation Program to include provisions for the Modified NPCCP. The BMP program became officially entitled the Modified NPCCP. The legislation, SB 1557, was introduced and passed during the 2007 Legislative Session. The Third Management Plan was successfully modified to include the Modified NPCCP on April 1, 2008, and the modifications became effective May 20, 2008.

Municipal BMP Advisory Committee

The enabling legislation for the Modified NPCCP allows for the establishment of an advisory committee to assist in evaluating the program. A Municipal BMP Advisory Committee was established in October 2008 to provide guidance to the Department in its efforts to review and evaluate the program's implementation and water use efficiency. The committee will review program developments, provide recommendations intended to improve implementation of the program, and participate in evaluations of the program.

Program Benefits

With the help of the stakeholder group, the Department has developed a program that it believes will increase water use efficiency in the municipal sector; a program that is especially applicable to private water utilities and smaller municipalities. Department staff will assist water providers in identifying the most effective water conservation measures for their communities. It should be recognized that the largest water providers (Phoenix, Tempe, Mesa, Chandler, Glendale, Peoria, Scottsdale, Gilbert, Goodyear, Avondale and Surprise in the Phoenix AMA, and Tucson and Metropolitan Domestic Water Improvement District in the Tucson AMA) have been successfully implementing extensive water conservation programs over the past 25 years. The successful experience of these water providers was used in developing the program. In contrast to the Total GPCD program, the Modified NPCCP focuses more directly on the water use characteristics within a water provider's service area. It also focuses more directly on conservation of all water resources, not just groundwater.

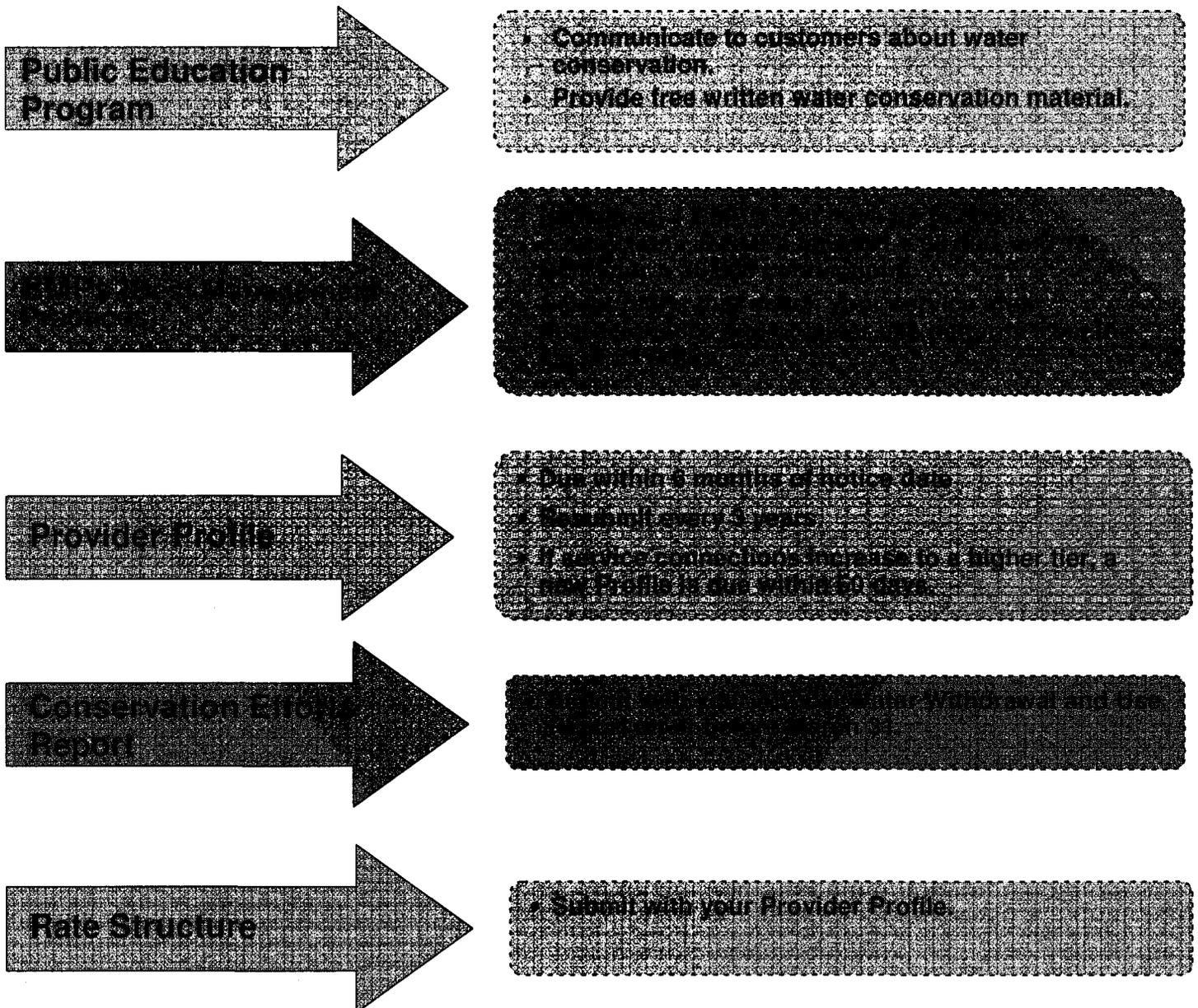


ARIZONA DEPARTMENT OF WATER RESOURCES
Conserving Water Today for Arizona's Tomorrow

Modified Non-Per Capita Conservation Program

A New AMA Regulatory Program for Large Municipal Providers*

Required for those that do not have a Designation of Assured Water Supply;
Optional for those that do.



*Large municipal providers serve more than 250 acre-feet of water per year for non-irrigation use.

ATTACHMENT 2

1 Steve Wene, No. 019630
2 MOYES SELLERS & SIMS LTD.
3 1850 N. Central Ave. Ste. 1100
4 Phoenix, AZ 85004
5 (602) 604-2141
6 Attorneys for Wickenburg Ranch Water, LLC

7
8 **BEFORE THE ARIZONA CORPORATION COMMISSION**

9 **COMMISSIONERS**

10 KRISTIN K. MAYES, CHAIRMAN
11 GARY PIERCE
12 PAUL NEWMAN
13 SANDRA D. KENNEDY
14 BOB STUMP

15 IN THE MATTER OF THE
16 APPLICATION OF WICKENBURG
17 RANCH WATER, LLC, AN ARIZONA
18 LIMITED LIABILITY COMPANY, FOR A
19 RATE ADJUSTMENT

Docket No. W-03994A-07-0657

**DIRECT TESTIMONY OF
PETER CHAN**

20 **Q-1 Please state your name and current employment position:**

21 **A-1** Peter Chan, PE (AZ 30677)
22 President – CSA Engineering

23 **Q-2 Describe your educational and professional background:**

24 **A-2** Bachelor of Science in Civil Engineering
25 Master of Science in Environmental Engineering
26 Professional Engineer, State of Arizona – specializing in water and wastewater
27 treatment systems

28 Arizona Department of Environmental Quality – Certified Operator, No. 26138
Grade 2 – Water Treatment Plant Operator

1 Grade 2 – Water Distribution System Operator
2 Grade 2 – Wastewater Treatment Plant Operator
3 Grade 2 – Wastewater Collection System Operator

4 **Q-3 What is the purpose of your testimony?**

5 **A-3** The purpose of this testimony is to establish that CSA Engineering has been hired
6 by the Wickenburg Ranch Water Company to operate the water system. I will
7 serve as the certified operator. I have reviewed Decision No. 70741 and believe
8 implementing 10 Best Management Practices is not required by rule and is
9 impractical for a small water company.
10

11 **Q-4 Describe your experience as a certified operator:**

12 **A-4** In the past 20 years, I have been involved in the design, retrofit or start-up
13 operations for the following water storage, pump station and treatment facilities:
14

- 15 • Desert Oasis Reservoir & Pump Station, Surprise, Arizona
- 16 • Sun City 5.1 Well, Arizona
- 17 • Sun City West Water Well, Arizona
- 18 • Greer Ranch North Well, Arizona
- 19 • Pleasant Valley Reservoir & Pump Station, Peoria, Arizona
- 20 • Quintero Microfiltration Water Treatment Plant, Peoria, Arizona
- 21 • Liberty Farms Water Campus, Maricopa County
- 22 • Trillium Arsenic Treatment Facility, Buckeye, Arizona

23
24
25
26 I also have been involved in the design, retrofit or start-up operations for the
27 following wastewater treatment facilities:
28

- 1 • 91st Avenue 180 mgd Chlorination Improvements Project
- 2 • 4.5 mgd Arrowhead Ranch Water Reclamation Facility
- 3 • Boulders West Wastewater Treatment Facility
- 4 • Roberto Bustamante Wastewater Treatment Facility
- 5 • Gold Canyon Water Reclamation Facility
- 6 • Quintero Water Reclamation Facility
- 7
- 8

9 **Q-5 Please explain your proposed role as the certified operator:**

10 A-5 My role as a certified operator is to properly operate the plant to ensure safe and
11 reliable water service that meets all applicable rules and regulations is delivered to the
12 customers.
13

14 **Q-6 Why do you believe implementing 10 Best Management Practices is not**
15 **required by rule?**
16

17 A-6 The Best Management Practices referenced in Decision No. 70741 are applicable
18 by rule only to water providers within Active Management Areas and Wickenburg Ranch
19 is not within an Active Management Area. Further, it only applies to water providers
20 who are not designated and the Water Company is a designated provider. Moreover, the
21 rules state that a water providers with less than 5,000 connections should apply one best
22 management practice. Only water providers with more than 30,000 connections have to
23 adopt 10 Best Management Practices. This is because small water companies do not
24 have the resources to implement so many practices.
25

26 **Q-7 Why do you believe implementing 10 Best Management Practices is not**
27
28

1 **practical for the Water Company?**

2 **A-7** The Water Company is going to serve a new development. The plumbing being
3 installed will be efficient, so there will be no reason to retrofit or improve such facilities.
4 Further, as a small water provider, the Water Company cannot afford rebates or funding
5 conservation research. Unlike a city, town, or county, a water company does not have the
6 legal authority to require its private customers to make most of improvements suggested
7 in Category 5.
8
9

10 **Q-8 Is the decision to adopt Best Management Practices essentially a management**
11 **decision that should be left to the Water Company?**

12 **A-8** Yes. The Water Company should be able to choose whether or not it is prudent to
13 implement such practices, but it should not be required to do so, especially before there is
14 a history of water service.
15
16

17 **Q-9 Do you know of any other water company that has been required to adopt**
18 **these best management practices by the Arizona Corporation Commission?**

19 **A-9** No.
20

21 **Q-10 Does that conclude your direct testimony?**

22 **A-10** Yes.
23
24
25
26
27
28

ATTACHMENT 3

1 Steve Wene, No. 019630
2 MOYES SELLERS & SIMS LTD.
3 1850 N. Central Ave. Ste. 1100
4 Phoenix, AZ 85004
5 (602) 604-2141
6 Attorneys for Wickenburg Ranch Water, LLC

7
8 **BEFORE THE ARIZONA CORPORATION COMMISSION**

9 **COMMISSIONERS**

10 KRISTIN K. MAYES, CHAIRMAN
11 GARY PIERCE
12 PAUL NEWMAN
13 SANDRA D. KENNEDY
14 BOB STUMP

15 IN THE MATTER OF THE
16 APPLICATION OF WICKENBURG
17 RANCH WATER, LLC, AN ARIZONA
18 LIMITED LIABILITY COMPANY, FOR
19 A RATE ADJUSTMENT

Docket No. W-03994A-07-0657

**DIRECT TESTIMONY OF
WILLIAM I. BROWNLEE**

20 **Q-1 Please state your name and current employment position:**

21 **A-1** William I. Brownlee, Manager, the M3 Companies.

22 **Q-2 Describe your educational, professional background, and experience with**
23 **forming and operating water companies:**

24 **A-2** I am a managing partner of the M3 Companies primarily responsible for contract
25 negotiations, feasibility analysis, equity and financing, land and community
26 planning, entitlements, engineering and development, as well as legal and
27 accounting. I have been active in Arizona real estate for more than two decades.
28

1 During that time, I have been involved with the construction of water systems
2 necessary to develop property. Recently, I helped form the American Ranch
3 Domestic Water Improvement District and served as a director. Director
4 responsibilities include governing and managing district operations.
5

6 **Q-3 What is the purpose of your testimony?**

7
8 **A-3** The purpose of my testimony is to: (1) explain the relationship between the water
9 company ownership, management, and landowners; (2) the proceedings that lead
10 to the amended decision; (3) cost and economic impact of rainwater catchments;
11 and (4) rainwater catchments, xeriscaping, and Best Management Practices are not
12 necessary for the operation of the water company.
13

14 **Q-4 Explain the relationship between the water company ownership,**
15 **management, and landowners as well as your role with each.**

16
17 **A-4** Wickenburg Ranch is owned by JVT Investors, LLC (JVT), Van Development
18 Co., Inc., and 5860 Development, Inc (collectively "Landowners"). JVT is
19 handling the development of the Resort and Wickenburg Ranch. JVT is an
20 Arizona limited liability company, with Van Tuyl Family Trusts as members, and
21 7575 Development, Inc. as manager. Larry Van Tuyl is the President of 7575
22 Development. Van Development Co., Inc. is a Texas corporation, with Cecil Van
23 Tuyl as President. 5860 Development, Inc. is an Arizona Corporation, with Larry
24 Van Tuyl as President. The Landowners are acting privately and not as a public
25 service corporation.
26
27
28

1 M3 Builders is managing the development of the land as well as the Wickenburg
2 Ranch Water Company LLC (“Water Company”) and wastewater company. M3
3 Builders is a developer of master planned communities. After the sale to the
4 Landowners, M3 Builders was retained as the project manager, and now manages
5 the day-to-day construction operations of the development for the property.
6

7
8 The Water Company is an Arizona entity. The member of the Water
9 Company is Van Wick LLC. The Water Company is a public service corporation.
10 Because M3 Builders is managing the Water Company, wastewater company, and
11 the land operations, I have knowledge regarding the Landowners and their plans
12 for the property, but my appearance in this proceeding is on behalf of the Water
13 Company.
14

15
16 **Q-5 Please explain why the Water Company does not want to require that all of**
17 **its customers install rainwater catchments as a condition of service.**

18 **A-5** First, rainwater catchment systems are expensive to operate and maintain. To
19 purchase and install rainwater catchments that will operate well in the arid
20 Wickenburg area will likely cost homeowners approximately \$6,000 to \$8,000.
21 Accordingly, at full build-out of all 2,324 residential homes, the rainwater
22 catchments could cumulatively cost approximately \$14,000,000 to \$18,600,000 to
23 install. In today’s market, home builders are trying everything they can to reduce
24 costs, so adding rainwater catchment systems and associated expenses run
25 contrary to market demands. Further, other developments in the area will not have
26 this requirement, thereby making the Wickenburg Ranch community less
27
28

1 competitive on a cost basis as well as a maintenance basis. This all affects the
2 Water Company because if the lots are not purchased, then the Water Company
3 has fewer customers and less revenue, making it financially weaker and causing its
4 actual customers to pay higher water rates in addition to purchasing and
5 maintaining the rainwater catchment system.
6

7
8 Furthermore, these catchments can cause health and safety concerns due to
9 water stagnation and require significant maintenance in arid climates, which is one
10 reason the systems commonly fall into disrepair.
11

12 **Q-6 Please explain why the Water Company does not want to require that all of**
13 **its customers to fully xeriscape their front yards as a condition of service.**

14 **A-6** Rather than requiring mandatory xeriscaping in the front yards, we find it more
15 practical and consumer friendly to provide a set of guidelines that limits
16 landscaping that has a large water requirement, such as turf, and designate a
17 reasonable area of turf per lot. This will give customers flexibility and encourage
18 the utilization of drought tolerant, low water use landscaping designs.
19

20
21 **Q-7 Are you concerned that the rainwater catchments will not function well in**
22 **Wickenburg Ranch?**

23 **A-7** Yes. Based upon my research, I have learned that rainwater catchments do not
24 work well in arid climates because they do capture enough rainwater to work
25 effectively. This leads to homeowners trying to bypass the system, maintenance
26 issues with algae growth, and clogged lines and heads within the irrigation system.
27

28 In addition, this is a deterrent for lots sales within the community to builders due

1 to the high risk of warranty issues related to the water catchment systems.

2 Without a continuous source of rainwater to capture and deliver and ongoing
3 maintenance, the equipment falls into disrepair.
4

5 **Q-8 Are you concerned that implementing a large-scale rainwater catchment**
6 **program may give rise to legal liability for the landowners?**
7

8 **A-8** Yes. There is no state law that exempts water catchments from the rules
9 governing surface water. In other states that follow the doctrine of prior
10 appropriation, such as Colorado and Utah, rainwater catchments cannot be legally
11 used without a permit or decreed water right. Yavapai County retention policies
12 preclude rainwater catchment basins based upon health and water rights concerns.
13 See Exhibit 1. Here, the rainwater catchments taking water from rooftops alone
14 could withdraw 138 acre-feet of water from the surface water system, so it seems
15 prudent that the landowners installing rainwater catchments systems might have to
16 secure a water right before taking the rainwater.
17
18

19 **Q-9 Did you have any notice before the hearing when the Arizona Corporation**
20 **Commission added the amendments regarding the conditions concerning**
21 **rainwater catchments, xeriscaping, or best management practices?**
22

23 **A-9** No. These were never issues throughout the year-long proceeding until the
24 hearing before the Arizona Corporation Commission. The Water Company did
25 not receive actual notice of the proposals until minutes before that hearing. Thus,
26 the Water Company had no time to prepare to rebut these conditions. Also, the
27 Water Company now understands that it has no authority to require the
28

1 landowners within its CC&N to install rainwater catchments or xeriscaping. In
2 addition, the Water Company is not subject to the best management practice rules
3 promulgated by ADWR.
4

5 **Q-10 Why do you believe the Arizona Corporation Commission wants to require**
6 **the Water Company and its customers to be subject to the rainwater**
7 **catchment, xeriscaping, and best management practice terms as set forth in**
8 **Decision No. 70741?**
9

10 **A-10** Chairman Mayes stated at the hearing, and the Decision makes clear, that the
11 reason for those amendments was because Wickenburg Ranch resort has a golf
12 course. It is important to note, however, that the landowners have received the
13 proper approvals from Yavapai County to construct and operate the golf course
14 and the landowners have the legal right to use the groundwater for that purpose.
15 Moreover, as the community builds out, the golf course will be increasingly
16 irrigated with effluent and ultimately effluent will supply 100% of its irrigation
17 demand.
18
19
20

21 **Q-11 Does that conclude your direct testimony?**

22 **A-11** Yes.
23
24
25
26
27
28

EXHIBIT 1



5. STORMWATER STORAGE (DETENTION/RETENTION)

Maintenance Policies

- l. A maintenance plan shall be prepared in conjunction with the detention/retention basin design that includes both scheduled and unscheduled maintenance activities. SCHEDULED MAINTENANCE includes such items as mowing, pruning, and trash removal that are performed on a regular basis. UNSCHEDULED MAINTENANCE includes repairs, usually made necessary by storms and floods, which are discovered either during regularly scheduled inspections, or during inspections made after flooding. Unscheduled maintenance shall also include removal of sediment buildup.
- m. Maintenance ramps or other access shall be provided into detention/retention facilities in order to facilitate scheduled and unscheduled maintenance activities. Access easements from public right-of-way shall be provided to all detention/retention facilities.
- n. Maintenance of local detention/retention facilities, provided in conjunction with new developments, shall be the responsibility of the private property owner or neighborhood association. The District shall reserve the authority to periodically inspect privately-owned detention/retention basins to ensure satisfactory maintenance is being provided.
- o. Final Plats, Development Plans and CC&R's shall have a note stating (a) that the owner(s) shall be solely responsible for the operation, maintenance, and liability for detention/retention systems; and, (b) that District staff may periodically inspect the detention/retention facilities to verify that scheduled and unscheduled maintenance activities are being performed adequately.

Retention Policies

- p. Stormwater retention basins are generally not permitted within Yavapai County, because of concerns related to water rights and the potential problems associated with long-term ponding of stormwater. However, retention basins may be permitted to meet stormwater detention criteria when a more conventional stormwater detention basin is impractical (e.g. if adequate grade is not available for draining the basin).
- q. Maximum disposal times for stormwater runoff for retention facilities are as follows:
 - q.1 12 hours for basins that intercept runoff from an upstream watershed area that is ten acres in size, or smaller.
 - q.2 24 hours for basins that intercept runoff from an upstream watershed area that is greater than ten acres and less than 30 acres in size.

ATTACHMENT 4

1 Steve Wene, No. 019630
2 MOYES SELLERS & SIMS LTD.
3 1850 N. Central Ave. Ste. 1100
4 Phoenix, AZ 85004
5 (602) 604-2141
6 Attorneys for Wickenburg Ranch Water, LLC

7
8 **BEFORE THE ARIZONA CORPORATION COMMISSION**

9 **COMMISSIONERS**

10 KRISTIN K. MAYES, CHAIRMAN
11 GARY PIERCE
12 PAUL NEWMAN
13 SANDRA D. KENNEDY
14 BOB STUMP

15 IN THE MATTER OF THE
16 APPLICATION OF WICKENBURG
17 RANCH WATER, LLC, AN ARIZONA
18 LIMITED LIABILITY COMPANY, FOR A
19 RATE ADJUSTMENT

Docket No. W-03994A-07-0657

**DIRECT TESTIMONY OF
WENDELL PICKETT**

20
21 **Q-1 Please state your name and current employment position:**

22 **A-1** Wendell Pickett, partner and vice-president of Greey Pickett Partners.

23
24 **Q-2 Describe your educational and professional background:**

25 **A-2** I receive a B.A. from University of Redlands with an emphasis in planning and
26 design. I have been in the planning and design industry since 1984. Most of that
27 time I have focused on large-scale master-planned communities, such as
28

1 Wickenburg Ranch. Local Arizona projects include Vistancia and Superstition
2 Mountain communities.

3
4 **Q-3 What is the purpose of your testimony?**

5 **A-3** The purpose of this testimony is to explain (1) the design of the community as it
6 relates to surface water run off; (2) planned development landscaping and
7 vegetation; (3) the economic impact of rainwater catchments for xeriscaping;
8 and (4) operational issues with rainwater catchments.

9
10 **Q-4 Please explain how the Wickenburg Ranch community drainage is planned.**

11 **A-4** Generally speaking, consistent with sound engineering practice and land planning,
12 the community drainage is designed to cause surface water to flow away from all
13 structures towards natural drainages and basins. Stormwater falling upon
14 residential and commercial lots flows away from the structures generally into the
15 drainage system. This avoids the health and safety issues that can arise due to
16 retaining stormwater on lots.
17

18
19 **Q-5 What type of landscaping is planned for the development?**

20 **A-5** Wickenburg Ranch is being carefully designed to use native and desert vegetation
21 throughout most of the development. Further, the golf course was designed to use
22 35% less water than the average golf course in the central Arizona area.
23

24
25 **Q-6 In your opinion, what is the impact of requiring only xeriscaping in front
26 yards of all residential lots within Wickenburg Ranch?**

27 **A-6** Approximately 50% of potential home buyers want some amount of non-
28 xeriscaped landscaping in the front yard. If all of the front yards within

1 Wickenburg Ranch had xeriscape exclusively, then the curb appeal for the homes
2 would suffer drastically. This will have a substantial adverse impact on home
3 absorption rates and limit the ability of current landowners to sell portions of the
4 project to home builders.
5

6 **Q-7 What is a rainwater catchment system?**
7

8 **A-7** There are two types of rainwater catchment systems. The first type of catchment
9 is essentially a ponding catchment where stormwater run-off reaching the ground
10 is funneled into what is essentially a small water basin created by excavating an
11 area below surface grade. The second type of catchment system is a container or
12 barrel catchment system. This system typically collects stormwater from rooftops
13 and other impervious improvements and delivers it into a container. This water is
14 not safe to drink without treatment and should be managed very carefully.
15
16

17 **Q-8 What type of operational issues exist with the ponding type of rainwater**
18 **catchment system?**
19

20 **A-8** First of all, the ponding area is usually landscaped with turf so that the catchment
21 basin avoids the issues relating to mud, which can cause problems when the water
22 is being cycled for use. This turf creates an additional water demand during times
23 when there is limited rainfall. Further, when the ponds contain water, safety issues
24 can arise due to the fact the pond will hold water for some time and that water
25 stagnates. This can cause serious health concerns, such as those associated with
26 West Nile virus. Further, such ponds constitute an attractive nuisance giving rise
27 to health and safety risks for children who may play near or in the ponding area.
28

1 Moreover, since these ponds will cause water to filtrate into the ground, it can
2 create soil stability issues and cause nearby buildings and other structures to fail.
3
4 Finally, they are very expensive to install and operate, especially where there is
5 only a limited supply of rainwater.

6 **Q-9 What operational issues exist with the container type of catchment systems?**

7
8 **A-9** My understanding is that the container catchment systems hold water essentially in
9 a barrel of some size. In dry areas such as Wickenburg, these barrels may hold the
10 water for long periods until there is enough water to use for landscaping. This
11 causes the water to stagnate and in warm temperatures, the water can become very
12 unsafe for human consumption. Further, the barrels and system will eventually
13 fail, which causes the same problems that the ponding catchments cause. These
14 container systems can be expensive to install and operate and require substantial
15 maintenance. Simply stated, these container systems are not cost effective.
16
17

18 **Q-10 Did you research the state rules and regulations for specifications on**
19 **rainwater catchments?**

20
21 **A-10** Yes, I did. I found no rules or regulations regarding rainwater catchments.

22 **Q-11 Did you research any other jurisdictions regarding rainwater catchments?**

23
24 **A-11** Yes. I researched the use of rainwater catchments in Santa Fe and Tucson, and in
25 both areas, the general consensus is that they did not work well and the public
26 opinion of these systems was negative.

27 **Q-12 Does that conclude your direct testimony?**

28 **A-12** Yes.

ATTACHMENT 5

1 Steve Wene, No. 019630
2 MOYES SELLERS & SIMS LTD.
3 1850 N. Central Ave. Ste. 1100
4 Phoenix, AZ 85004
5 (602) 604-2141
6 Attorneys for Wickenburg Ranch Water, LLC

7
8 **BEFORE THE ARIZONA CORPORATION COMMISSION**

9 **COMMISSIONERS**

10 KRISTIN K. MAYES, CHAIRMAN
11 GARY PIERCE
12 PAUL NEWMAN
13 SANDRA D. KENNEDY
14 BOB STUMP

15 IN THE MATTER OF THE
16 APPLICATION OF WICKENBURG
17 RANCH WATER, LLC, AN ARIZONA
18 LIMITED LIABILITY COMPANY, FOR A
19 RATE ADJUSTMENT

Docket No. W-03994A-07-0657

**DIRECT TESTIMONY OF
JOEY PLATTS**

20 **Q-1 Are you the owner of property within the Wickenburg Ranch Water**
21 **Company's ("Water Copany") CC&N?**

22 **A-1 Yes.**

23
24 **Q-2 Are you aware of the Arizona Corporation Commission's decision demanding**
25 **that the Water Company require all of its customers install rainwater**
26 **catchments and full xeriscape in the front yard as a condition of potable**
27 **water service?**
28

1 A-2 Yes.

2 Q-3 As a person who would be subject to those conditions if implemented, what is
3 your opinion about those requirements?
4

5 A-3 I believe it would be very unfair to require water customers to meet these
6 demands. These demands are not necessary and the rainwater catchment systems can be
7 very expensive. It would be a complete waste of money. Based on conversations with
8 engineers, I believe these requirements make no sense and would not save any water, but
9 it could create all sorts of problems. These conditions should be removed.
10

11 Q-4 Does that conclude your direct testimony?
12

13 A-4 Yes.
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28