

Arizona Department of Water Resources

2009

In June 2008, providers required to participate in the Modified Non-Per Capita Conservation Program were notified that regulation under the program would begin in January 2010, and that Provider Profiles were due July 1, 2009. Forty-three providers entered the program from the five AMAs: 22 from the Phoenix AMA, 5 from the Pinal AMA, 2 from Prescott AMA, 3 from the Santa Cruz AMA, and 11 from the Tucson AMA.

Modified Non- Per Capita Conservation Program

Modified Non-Per Capita Conservation Program 2009 Progress Report

October 31, 2009

Prepared by Ruth Greenhouse and Gordon Wahl

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1. Background

The Modified Non-Per Capita Conservation Program (Modified NPCCP), a performance-based program developed in conjunction with stakeholders from all Active Management Areas (AMAs), became effective in May 2008. All large municipal water providers that do not have a Designation of Assured Water Supply are required to participate in the program; participation is optional for designated providers.

The Modified NPCCP 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 53 BMPs are divided into seven categories: 1. Public Awareness, 2. Education and Training, 3. Outreach Services, 4. Physical System Evaluation and Improvements, 5. Ordinances, Conditions of Service, Tariffs, 6. Rebates/Incentives, and 7. Research/Innovation.

2. Advisory Committee

Pursuant to the second modification to the Third Management Plan, the Director established an advisory committee to assist in evaluating the effectiveness of the program. To date, the committee has met four times: October 29, 2008, November 20, 2008, December 15, 2008, and March 31, 2009. The main focus was the review of materials, forms, and other resources developed for the program. Future meetings will focus on plans for program evaluation.

Advisory Committee

Bruce Hallin, SRP
 Fernando Molina, Tucson Water Department
 Graham Symmonds, Global Water Resources
 Gregg Capps, City of Chandler
 Jake Lenderking, Arizona American Water
 Shilpa Hunter-Patel for Robson Communities
 John Munderloh, Water Resources Manager
 Martin Garland, Rio Rico Utilities, Inc.
 Ron Whittler, Town of Buckeye
 Steve Olea, Arizona Corporation Commission
 Steve Olson, Arizona Municipal Water Users Association
 Tom Harrell (for Bill Garfield) Arizona Water Company
 Warren Tenney, Metro Domestic Water Improvement District

ADWR Staff

Gordon Wahl, Prescott AMA, Muni Lead
 Ruth Greenhouse, MNPCCP Coordinator
 Alejandro Barcenas, Santa Cruz AMA
 Patty Smith, Pinal AMA
 Mary Bauer, Tucson AMA
 Sandra House, Phoenix AMA

3. Program Resources

The following resource materials, documentation, and forms are posted on the ADWR website www.azwater.gov/MNPCCP:

Program Description Materials

- MNPCCP At-A-Glance
- Substantive Policy Statement and Guidance Document
- Frequently Asked Questions
- Description of Best Management Practices and Public Education Program
- Suggestions for Matching Service Area Characteristics with BMPs (matrix)
- BMPs Applicable to All
- List of BMPs

Forms

- Provider Profile
- Conservation Efforts Report

TMP Modification and Background Information

- Modifications to Chapter 5, Municipal Conservation Program, Third Management Plan
- Public hearing and finding; Orders of Adopton
- Background and Rational for Program Development
- Evaluation and Stakeholder Process

Presentations and Materials from 2009 Workshops

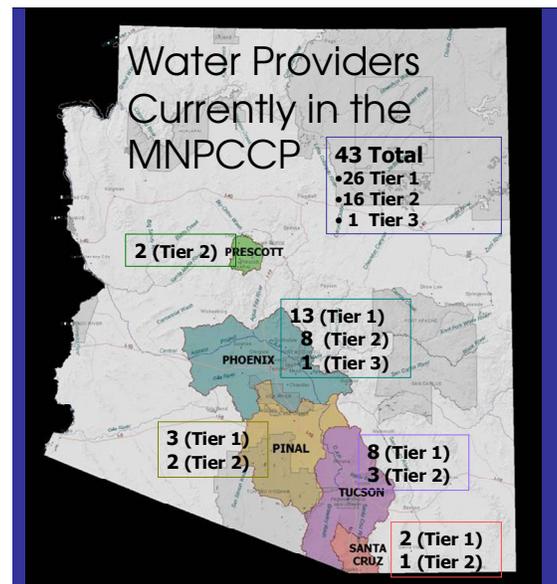
- January 20, 2009 Workshop: Implementing the Basic Public Education Program
- March 10, 2009 Workshop: System Audits, Metering, and Leak Detection

4. Summary of Process and Compliance

In June 2008, providers required to participate in the program were noticed that regulation under the program would begin in January 2010, and that Provider Profiles were due July 1, 2009. AMA staff established internal procedures for the review, approval, response and documentation of the Provider Profiles received. All providers in the program received approval letters prior to 90 day deadline (September 30, 2009). The Conservation Efforts Report will be used on an annual basis to determine a provider's compliance under the Modified NPCCP.

5. General Results

- A. 43 providers entered the program from the five AMAs:
- 22 from Phoenix AMA
 - 11 from Tucson AMA
 - 5 from Pinal AMA
 - 3 from Santa Cruz AMA
 - 2 from Prescott AMA
- B. Three providers that entered the program are designated:
- Town of Marana (Tucson AMA)
 - Santa Cruz Water Company (Pinal AMA)
 - City of Prescott (Prescott AMA)
- C. Number of providers in each tier:
- Tier 1 (up to 5000 connections): 26
 - Tier 2 (5001 – 30,000 connections): 16
 - Tier 3 (more than 30,001 connections): 1



D. Categories of BMPs most frequently selected:

- Category 3: Outreach Services
- Category 4: Physical System Improvement

Categories of BMPs Selected Most Frequently

1. Public Awareness/PR
2. Education and Training
- 3. Outreach Services**
- 4. Physical System Improvements**
5. Ordinances, Conditions of Service, Tariffs
6. Rebates & Incentives
7. Research/Innovation

E. BMPs most frequently selected:

- 4.2 Meter Repair and Replacement Program
- 3.6 High water use inquiry resolution
- 3.7 High water use notification

Top 3 BMPs Selected

		TIER		
	Total 43 providers	1 26 providers	2 16 providers	3 1 provider
4.2 Meter repair/replacement	24 56%	12 46%	11 69%	1
3.6 High water use inquiry resolution	14 33%	3 12%	10 63%	1
3.7 High water use notification	12 28%	4 15%	7 44%	1

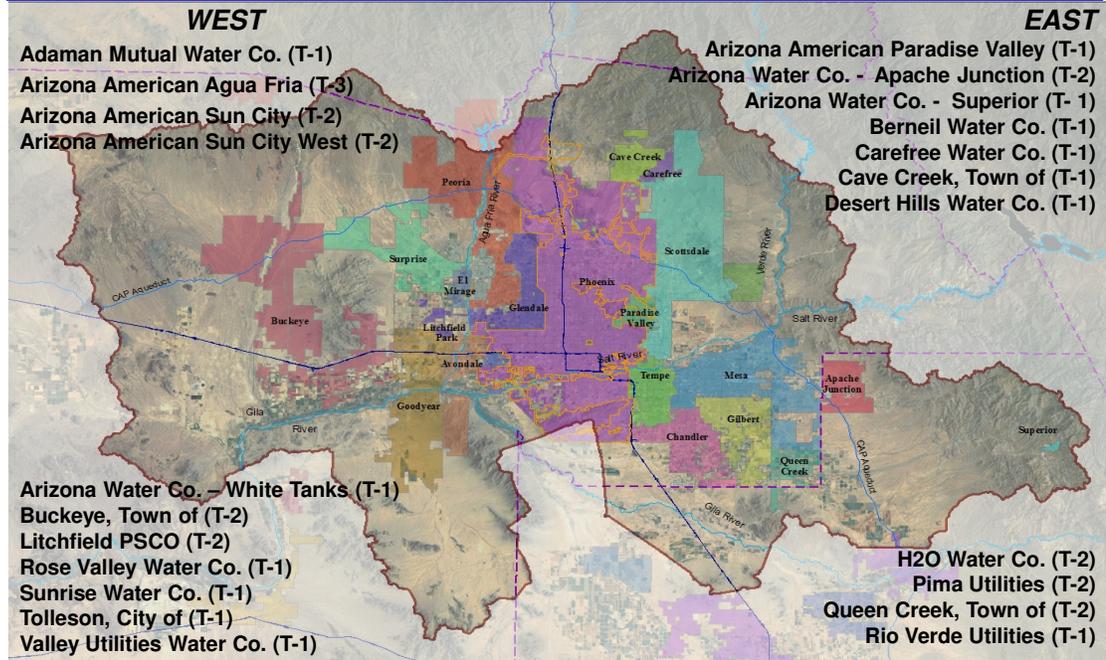
Note: Potential future entrants into the Modified NPCCP (total of 34) include:

- 11 small providers that will be noticed as large (4 in the Phoenix AMA, 1 in the Pinal AMA, and 6 in the Tucson AMA)
- 21 large providers currently in the GPCD Program (13 in the Phoenix AMA, 2 in the Pinal AMA, and 1 in the Santa Cruz AMA, and 5 in the Tucson AMA)
- Davis Monthan AFB and the University of Arizona (Tucson AMA)

6. Providers in the Modified NPCCP

	Large Provider Name	AMA	Tier
1	Adaman Mutual Water Company	Phoenix	1
2	Arizona American Water Company - Agua Fria	Phoenix	3
3	Arizona American Water Company - Paradise Valley	Phoenix	1
4	Arizona American Water Company - Tubac	Santa Cruz	1
5	Arizona American Water Company - Sun City	Phoenix	2
6	Arizona American Water Company - Sun City West	Phoenix	2
7	Arizona Water Company - Apache Junction	Phoenix	2
8	Arizona Water Company - Casa Grande	Pinal	2
9	Arizona Water Company - Coolidge	Pinal	1
10	Arizona Water Company – Oracle	Tucson	1
11	Arizona Water Company – Superior	Phoenix	1
12	Arizona Water Company - White Tanks	Phoenix	1
13	Avra Water Co-op Inc.	Tucson	1
14	Berneil Water Company	Phoenix	1
15	Buckeye, Town of	Phoenix	2
16	Carefree Water Company	Phoenix	1
17	Cave Creek, Town of	Phoenix	1
18	Community Water Company of Green Valley	Tucson	2
19	Desert Hills Water Company	Phoenix	1
20	Farmers Water Company	Tucson	1
21	Green Valley Domestic Water Improvement District	Tucson	1
22	H2O Water Company	Phoenix	2
23	Lago Del Oro Water Company	Tucson	2
24	Las Quintas Serenas Water Company	Tucson	1
25	Litchfield Park Service Company	Phoenix	2
26	Marana Domestic Water Improvement District	Tucson	1
27	Marana, Town of [designated]	Tucson	2
28	Picacho Water Company.	Pinal	1
29	Pima Utilities	Phoenix	2
30	Prescott Valley, Town of	Prescott	2
31	Prescott, City of [designated]	Prescott	2
32	Queen Creek, Town of	Phoenix	2
33	Ray Water Company	Tucson	1
34	Rio Rico Utilities, Inc.	Santa Cruz	2
35	Rio Verde Utilities, Inc.	Phoenix	1
36	Rose Valley Water Company	Phoenix	1
37	Santa Cruz Water Company [designated]	Pinal	2
38	Sunrise Water Company	Phoenix	1
39	Thunderbird Farms Improvement District	Pinal	1
40	Tolleson, City of	Phoenix	1
41	Valle Verde Water Company	Santa Cruz	1
42	Valley Utilities Water Company	Phoenix	1
43	Voyager Water Company	Tucson	1

MNPCCP Providers in the Phoenix AMA



22 providers have entered the program from the Phoenix AMA.

- 13 are Tier 1
- 8 are Tier 2
- 1 is Tier 3

Four small providers will be noticed as large and enter the program in the near future. None of the 13 designated large providers in the Phoenix AMA have chosen to participate in the program at this time. Nine are in the GPCD program and four are in the Non-Per Capita Conservation Program (NPCCP).

LARGE DESIGNATED PROVIDERS in the GPCD

- Apache Junction WFD (T-1)
- Avondale, City of (T-2)
- Chaparral City WC (T-2)
- El Mirage, City of (T-2)
- Glendale, City of (T-3)
- Goodyear, City of (T-2)
- Mesa, City of (T-3)
- Peoria, City of (T-3)
- Phoenix, City of (T-3)

LARGE DESIGNATED PROVIDERS in the NPCCP

- Chandler, City of (T-3)
- Gilbert, Town of (T-3)
- Scottsdale, City of (T-3)
- Tempe, City of (T-3)

MNPCCP Providers in the Pinal AMA

Five providers have entered the program from the Pinal AMA. Three are Tier 1; Two are Tier 2.

TIER 1

- Arizona Water Company - Coolidge
- Thunderbird Farms Improvement District
- Picacho Water Company

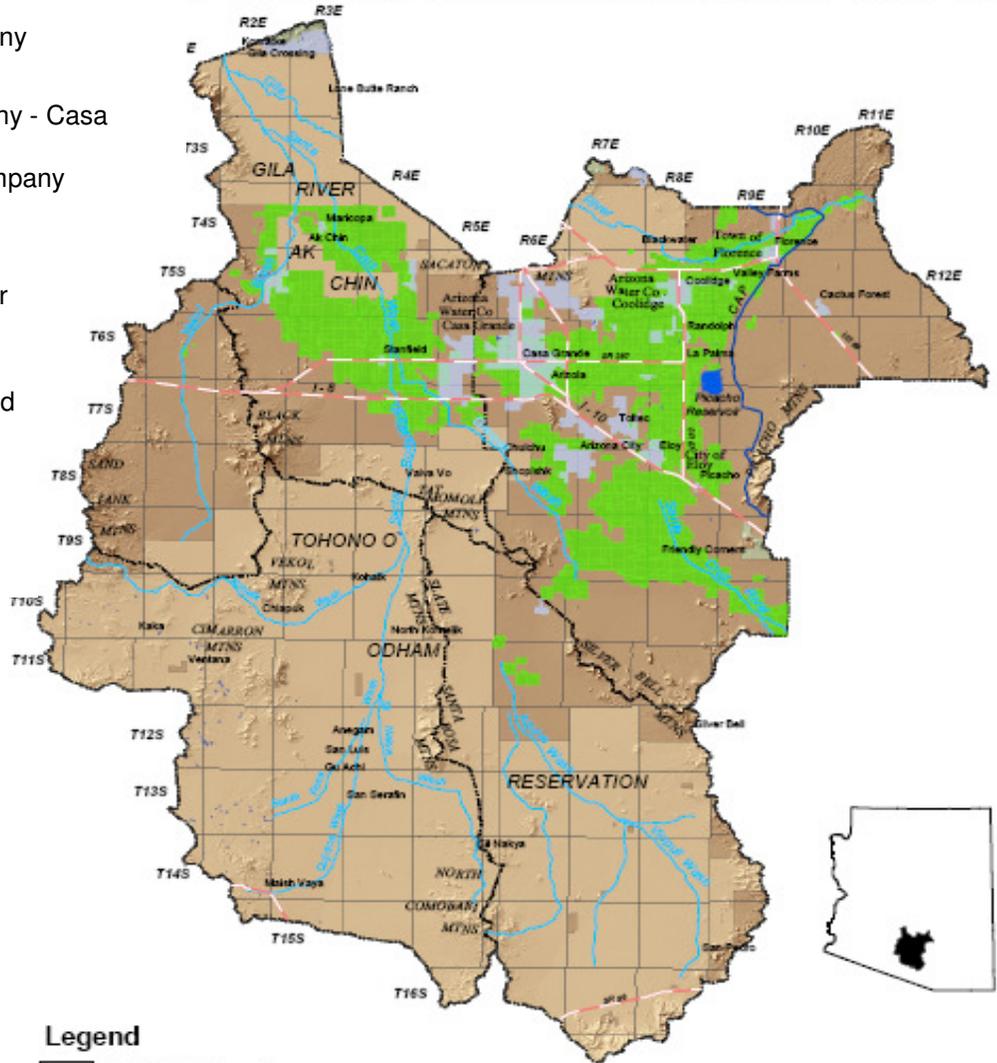
TIER 2

- Arizona Water Company - Casa Grande
- Santa Cruz Water Company [designated]

One small designated provider (Johnson Water Co.) will be noticed as large.

Currently, two large designated providers have not opted to enter the program:

- Town of Florence - GPCD
- City of Eloy - GPCD



- Legend**
- PINAL AMA Boundary
 - Lakes
 - Indian Reservations
 - GFRs
 - Municipal Water Service Providers
 - Central Arizona Project
 - Rivers and Streams
 - Subbasins
 - Major Roads
 - Townships

MNPCCP Providers in the Prescott AMA

Two providers have entered the Modified NPCCCP, both of which are TIER 2:

- Prescott Valley, Town of
- Prescott, City of [designated]



MNPCCP Providers in the Santa Cruz AMA

Three providers have entered the program from the Santa Cruz AMA; Two are Tier 1; One is Tier 2.

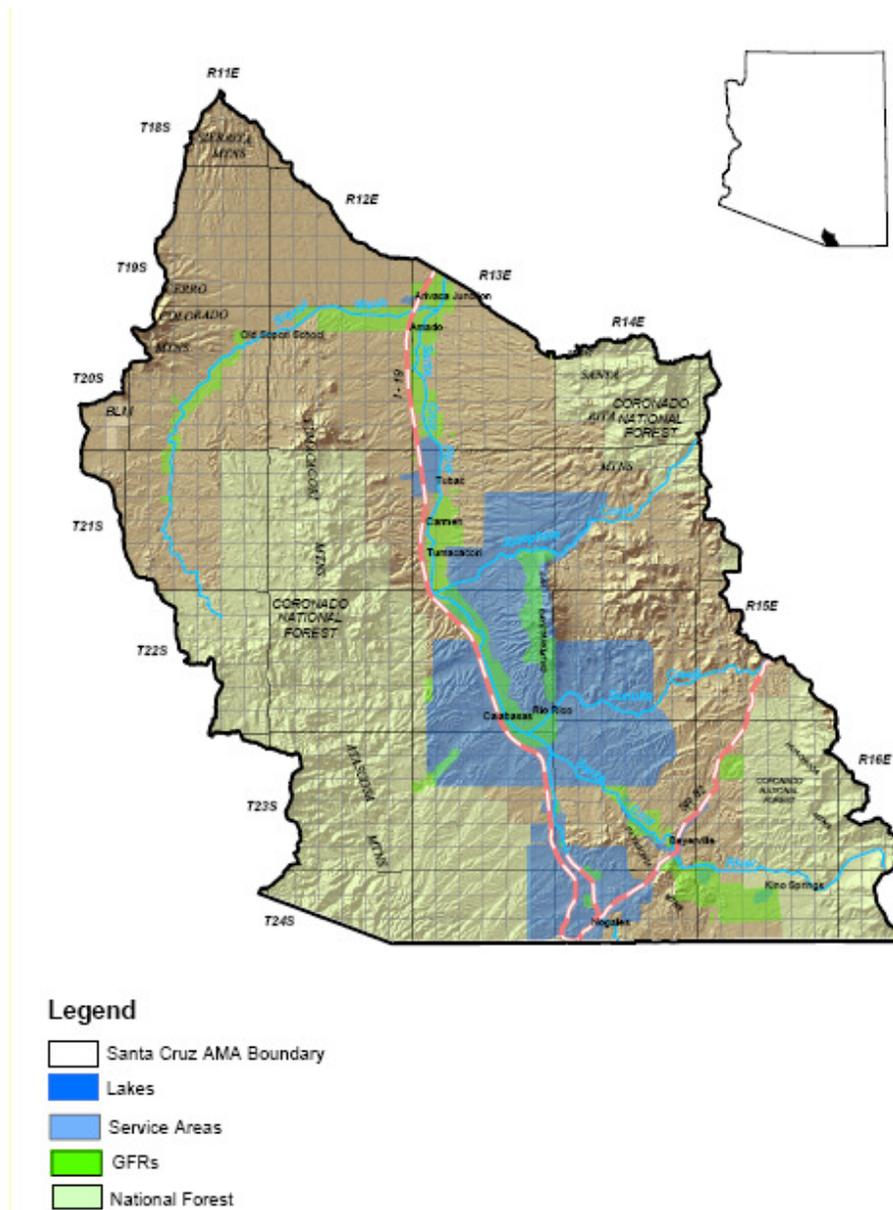
TIER 1

- Arizona American Water Company - Tubac
- Valle Verde Water Company

TIER 2

- Rio Rico Utilities, Inc.

Currently, the one large designated provider, City of Nogales, has not opted to enter the program.



MNPCCP Providers in the Tucson AMA

Eleven providers have entered the program from the Tucson AMA: Eight are Tier 1; Three are Tier 2.

TIER 1

- Arizona Water Company - Oracle
- Avra Water Co-op
- Farmers Water Company
- Green Valley Domestic Water Improvement District
- Las Quintas Serenas Water Company
- Marana Domestic Water Improvement District
- Ray Water Company
- Voyager Water Company

TIER 2

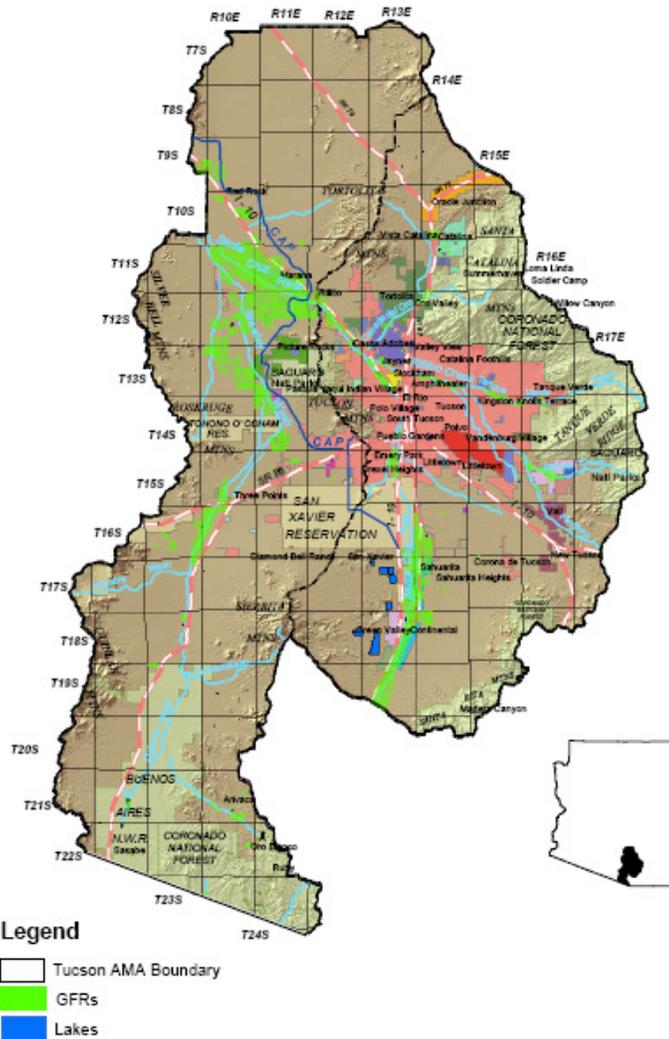
- Community Water Company of Green Valley
- Lago Del Oro Water Company
- Marana, Town of [designated]

Currently, one large designated provider has entered the program, and the following five designated providers have opted to remain in the GPCD program:

- Flowing Wells Irrigation District (T-1)
- Metro Water District (T-2)
- Oro Valley, Town of (T-2)
- Tucson, City of (T-3)
- Vail Water Company (T-1)

Six small providers in the Tucson AMA will be noticed as large, one of which is designated. Of the six small providers, the designated provider will have the option of entering the MNPCPP or remain in the GPCD program.

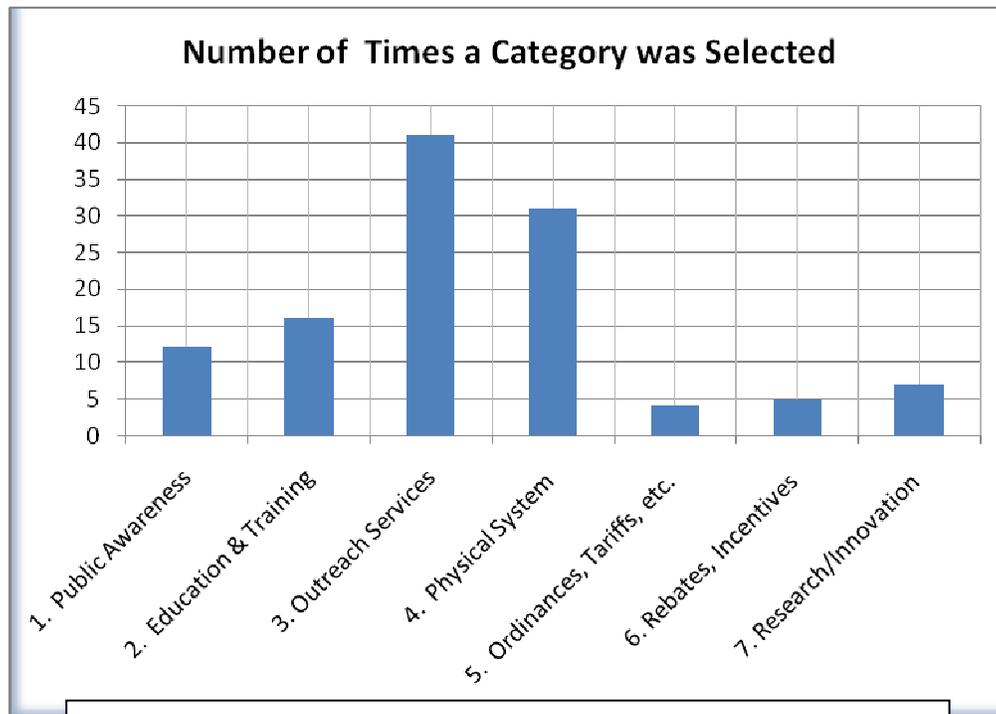
Entry into the program is pending for Davis Monthan AFB and the University of Arizona.



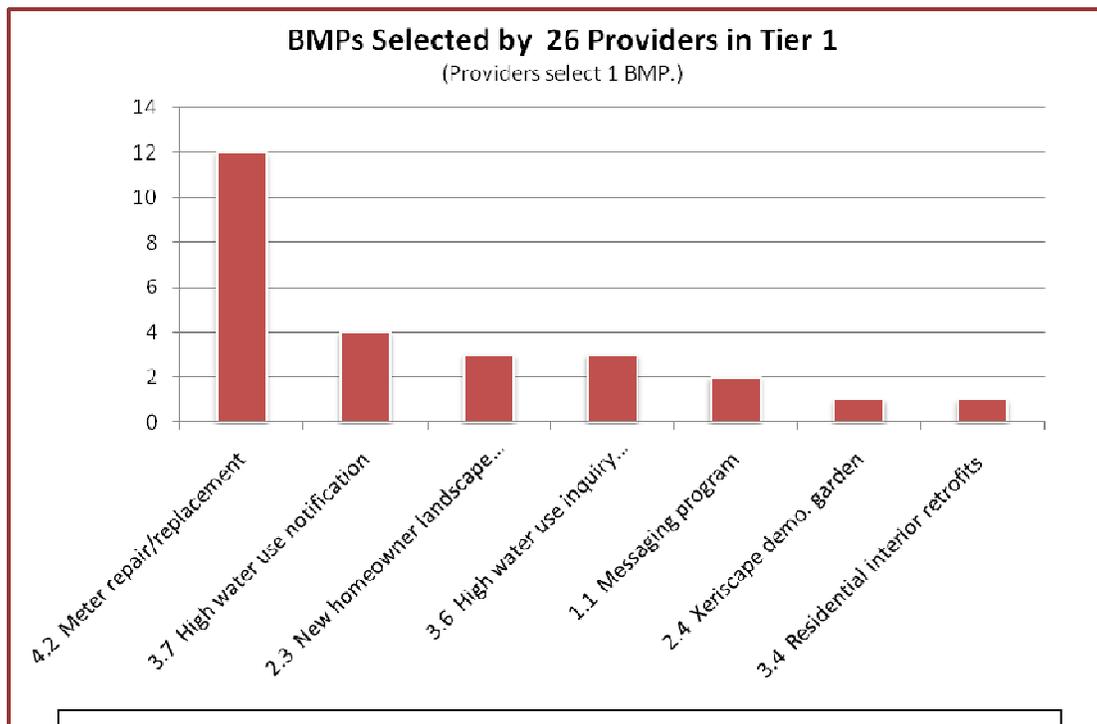
7. BMP Selection Analyses

BMP SELECTION BY CATEGORY		
Category	Of the 53 BMPs, the following 26 were selected:	Of the 53 BMPs, the following 27 were not selected:
① Public Awareness – Public Relations	1.1 Messaging program 1.2 Events/programs/presentations	1.3 Market surveys
② Education & Training	2.1 Adult education and training 2.2 Youth conservation education 2.3 New homeowner landscape info. 2.4 Xeriscape demo. garden 2.5 Distribution plan for materials	
③ Outreach Services	3.1 Residential audit program 3.4 Residential interior retrofits 3.6 High water use inquiry resolution 3.7 High water use notification 3.8 Water waste investigations	3.2 Landscape consultations 3.3 Water budgeting program 3.5 Non-residential interior retrofits
④ Physical System Evaluation & Improvement	4.1 Leak detection program 4.2 Meter repair/replacement 4.3 Water system audit	
⑤ Ordinances, Conditions of Service, Tariffs	5.2 Water tampering/water waste 5.4 Limit water intensive landscaping 5.8 Landscape watering restrictions	5.1 Low water use landscaping 5.3 Plumbing code requirements 5.5 Model home landscapes 5.6 Gray water/water harvesting 5.7 Car wash water recycling 5.9 Hot water recirculation devices 5.10 Retrofit on resale 5.11 Landscape water-use standards (non- res.) 5.12 Conservation tariff (PWC) 5.13 Water use plans
⑥ Rebates/Incentives	6.1 Toilet rebate 6.6 Water efficient appliances 6.9 Landscape conversion 6.11 Commercial/industrial program	6.2 High efficiency toilet rebate 6.3 Toilet replacement 6.4 Indoor water fixtures 6.5 Hot water systems 6.7 Graywater retrofit 6.8 Water harvesting retrofit 6.10 Xeriscape new landscapes 6.12 Large landscape conservation 6.13 Non-res. no/low interest loans
⑦ Research/Innovation	7.3 Evaluate new approaches 7.5 Implement smart irrigation 7.6 Develop industry partnerships 7.7 Support new technologies	7.1 Implement emerging technology 7.2 Conduct applied research 7.4 Analyze for water savings 7.8 Pilot new project/program

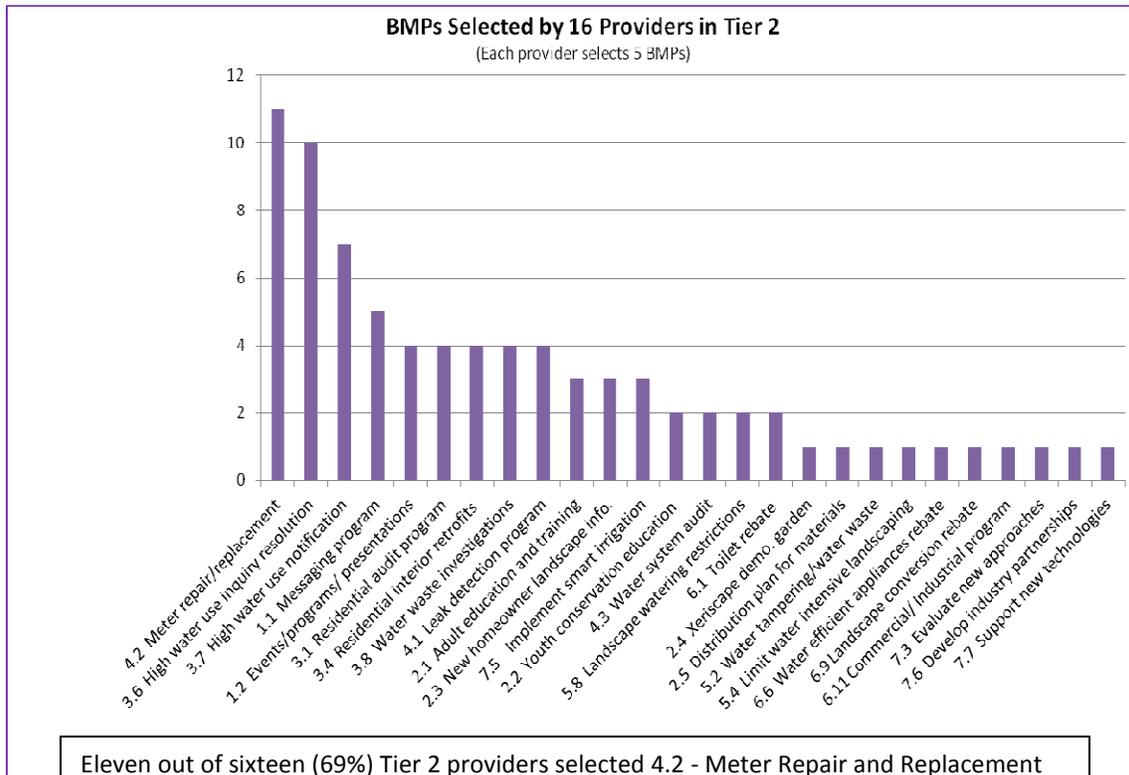
RANKED BMP SELECTION				
BMPs SELECTED	NUMBER OF PROVIDERS THAT SELECTED THE BMP			
43 Providers Selected the Following BMPs out of 53 Possible	Total Providers = 43	Tier 1 Providers = 26 (select 1 BMP)	Tier 2 Providers = 16 (select 5 BMPs)	Tier 3 Providers = 1 (select 10 BMPs)
4.2 Meter repair/replacement	24 (56%)	12 (46%)	11 (69%)	1
3.6 High water use inquiry resolution	14 (33%)	3 (12%)	10 (63%)	1
3.7 High water use notification	12 (28%)	4 (15%)	7 (44%)	1
1.1 Messaging program	8	2	5	1
2.3 New homeowner landscape info.	6	3	3	0
3.4 Residential interior retrofits	6	1	4	1
3.1 Residential audit program	5	0	4	1
1.2 Events/programs/presentations	4	0	4	0
2.1 Adult education and training	4	0	3	1
3.8 Water waste investigations	4	0	4	0
4.1 Leak detection program	4	0	4	0
2.2 Youth conservation education	3	0	2	1
4.3 Water system audit	3	0	2	1
7.5 Implement smart irrigation	3	0	3	0
2.4 Xeriscape demo. Garden	2	1	1	0
5.8 Landscape watering restrictions	2	0	2	0
6.1 Toilet rebate	2	0	2	0
7.6 Develop industry partnerships	2	0	1	1
2.5 Distribution plan for materials	1	0	1	0
5.2 Water tampering/water waste	1	0	1	0
5.4 Limit water intensive landscaping	1	0	1	0
6.6 Water efficient appliances rebate	1	0	1	0
6.9 Landscape conversion rebate	1	0	1	0
6.11 Commercial/Industrial program	1	0	1	0
7.3 Evaluate new approaches	1	0	1	0
7.7 Support new technologies	1	0	1	0



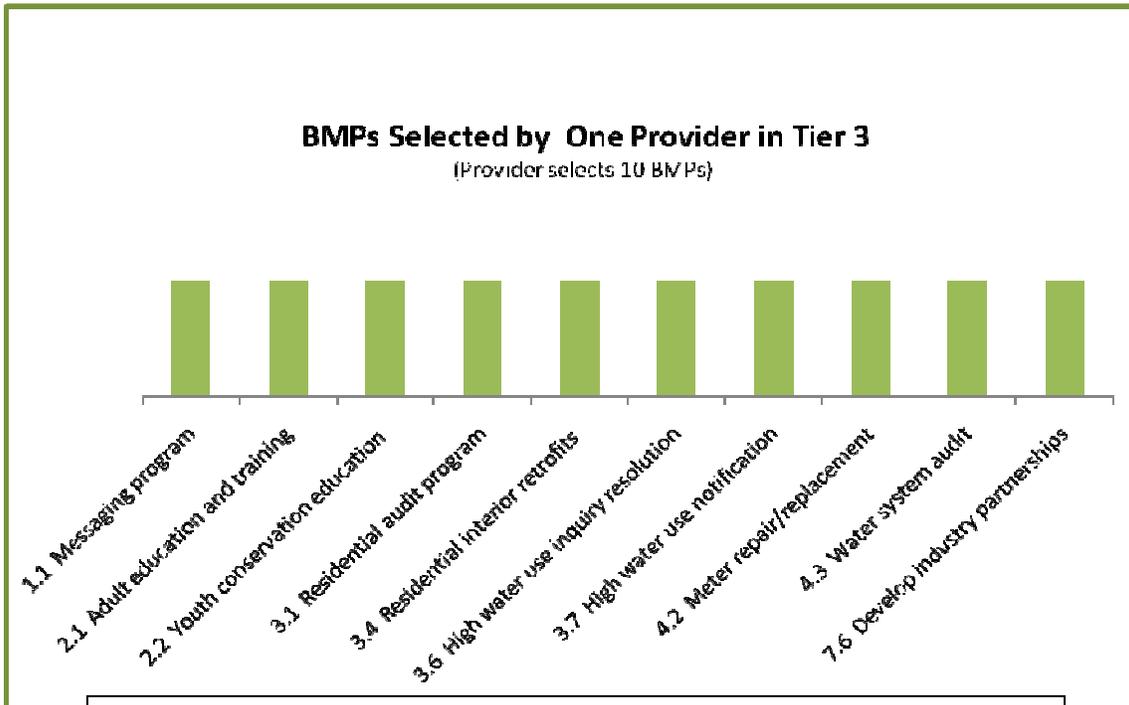
The BMPs selected most frequently were from Category 3 - Outreach Services (contains 8 BMPs) and Category 4 - Physical System Improvements (contains 3 BMPs). The BMPs least frequently selected were from Category 5 - Ordinances, Tariffs, and Conditions of Service (contains 13 BMPs).



Twelve out of twenty-six (46%) Tier 1 providers selected Meter Repair and Replacement.



Eleven out of sixteen (69%) Tier 2 providers selected 4.2 - Meter Repair and Replacement as one of their 5 BMPs. Ten providers (63%) selected 3.6 - High Water Use Inquiry Resolution. Seven providers (44%) selected 3.7 - High Water Use Customer Notification. Five (31%) providers selected BMP 3.6 and BMP 3.7.



Four of the ten (40%) BMPs selected by the Tier 3 provider were from Category 3 – Outreach Services.