Albuquerque Bernalillo County
Water Utility Authority

Fiscal Year 2014
Customer Conversations
Final Report

{Page Left Intentionally Blank}

Acknowledgements

Albuquerque Bernalillo County Water Utility Authority Board
Councilor Klarissa J. Peña, Chair
Commissioner Maggie Hart Stebbins, Vice Chair
Mayor Richard J. Berry
Commissioner Art De La Cruz
Councilor Rey Garduño
Councilor Trudy E. Jones
Commissioner Debbie O'Malley
Trustee Pablo Rael, Ex Officio Member

Mark S. Sanchez, Executive Director

Customer Advisory Committee
Fred Arfman
Lola Bird
David Brookshire
Wayne Frye
Sarah Gilstrap
Will Gleason
David Ritchey
Jesse Roach
John Shomaker

Staff Steering Committee
Frank Roth, Senior Policy Manager
John Stomp, P.E., Chief Operating Officer
Katherine Yuhas, Water Conservation Program Manager
David Morris, Public Affairs Manager

Other Staff Assistance
Jane DeRose-Bamman, Program Manager, Compliance
Barbara Gastian, Compliance Division Manager
Charles Leder, Plant Division Manager
Louis Martinez, Program Manager, Asset Management
Anthony Montoya, Chief Engineer, Water Resources, Planning and Engineering
Nancy Musinski, Principle Engineer, Water Resources, Planning and Engineering
David Price, P.E., Water Resources, Planning and Engineering Division Manager
Jeff Romanowski, Chief Engineer, Water Reclamation
Scott Salvas, Principle Engineer, Water Resources, Planning and Engineering
Rick Shean, Water Quality Hydrologist
Sharon Sivinski, Water Education Coordinator
Mark Winslow, Asset Management Coordinator

Mid Region Council or Governments (MRCOG)

A special thanks to MRCOG and Julie Luna for their assistance in providing the interactive audience polling system that allowed the Water Authority to conduct an activity with real-time results.

Mary Davis Hamlin – Lead Facilitator

Thank you for an exceptional job in planning and organizing the meetings as well as preparing and training the sub-group facilitators, and leading the facilitation of the meetings.

Small Group Facilitators

Liz Benton
Jeff Dorwart
Joe Early
Megan Hearting
Heidi Howley
Lindsay Laine
Ildiko Oravecz
Mary Parkin
Susana Rinderle
Myra Segal
Gail Summers
Jim White

Table of Contents

{Page Left Intentionally Blank}

Executive Summary

The Water Authority conducted four meetings called Customer Conversations in FY 2014 to engage its customers through topic forums. The purpose of these meetings was not only to comply with organizational Goals and Objectives but to also establish a process to engage customers on an ongoing basis as recommended by the Water Resources Management Strategy.

The Customer Advisory Committee (CAC) hosted each meeting and CAC members attended these meetings to observe the process and listen to customers' discussions and comments. A total of 203 customers attended the four meetings. Participants provided input on the topics listed below through activities developed by utility staff. In addition, 624 comments were recorded or received during the activities.

Meeting Topics

Activity 1	Long Term Water Supply Priorities
Activity 2	Water Waste Enforcement Program Retrofit
Activity 3	Water Reuse

In Activity 1, participants were provided nine water supply priorities to evaluate and score. Based on a point a system, Habitat Restoration and Parks received the highest votes, followed by Urban Trees and Urban Farms/Community Gardens based on allocation of water use required for these types of water use. However, based on number votes received for each priority, participants were most supportive of the Urban Farms/Community Gardens and Urban Trees.

In Activity 2, participants prioritized eight proposed changes to the Water Waste Enforcement Program. Participants favored linking the water waste violation fee to meter size the most. The second most favored program change was for a customer to be required to receive a water audit after their fourth violation. The third most favored program was for staff to meet with the customer in lieu of the first fee.

In Activity 3, participants provided their level of comfort around four scenarios on different water reuse options that the Water Authority may consider in the next ten years. Participants utilized interactive polling to respond to seven multiple choice questions for the four scenarios. The most supported scenario was to inject purified reclaimed wastewater into the aquifer and store it before being recovered and treated for delivery to customers. The second most supported scenario was to put the purified reclaimed water in the river upstream of diversion intake. Participants were somewhat supportive of storing reclaimed wastewater in a reservoir before treating for drinking water purposes, and they were somewhat less supportive of direct potable reuse where there would be no intervening storage.

Based on the meeting evaluations, participants gave a score of 4.5 or higher on a scale of 1 to 5 based on five evaluation statements.

{Page Left Intentionally Blank}

Introduction

The purpose of the Customer Conversations effort is to engage Water Authority customers through topic forums on a quarterly basis. Through the FY14 Goals and Objectives, the governing board directed staff to initiate public involvement meetings to obtain input from customers on the Water Authority's activities. This objective is consistent with Policy M of the Water Resources Management Strategy (WRMS). This Policy states that the Water Authority should continue to expand education to keep the public informed about the choices and tradeoffs involved in making water management decisions and to invite public comment and participation in implementation of these policies. The rationale for this policy is that an informed public contributes to the successful implementation of water resource management solutions. Recommendation 2 from the WRMS further states that the Water Authority should develop an adult education program to encourage a more complete awareness of the full range of water related subjects and to encourage voluntary water conservation programs. It was through the 2007 WRMS Town Hall that customers commented that they would like to continue to participate and be engaged with the Water Authority programs. This was further supported in 2013 while updating the 2024 Water Conservation Plan.

Water Authority staff established a steering committee to oversee the development and implementation of four scheduled meetings. Staff utilized a 2011 guidance document "Assessing Customer Preferences and Willingness to Pay" from the Water Research Foundation on how to plan and conduct focus groups. The Water Authority was a participating utility in this research and was used as a case study. The Water Authority hired a facilitator to assist in the planning, organizing, and facilitating of the four Customer Conversations meetings. The steering committee identified the three topics below and developed activities to engage and obtain input from customers.

1. Long Term Water Supply Priorities
2. Water Waste Enforcement Program Retrofit
3. Water Reuse

Four meetings were held in October and November 2013 and January and March 2014. Bill inserts were provided in September 2013 bills informing all customers of the forum, as shown in Appendix A. The utility's Customer Advisory Committee (CAC) hosted each meeting and members of the CAC attended these meetings to observe the process and listen to customer comments. The CAC's attendance is consistent with its mandate to assist and facilitate public review and discussion on Water Authority policies, plans and programs.

A total of 203 customers attended the four meetings with an average attendance of 51 per meeting. In addition, each customer received a $20 credit on their water/sewer bill for attending. All attendees had to pre-register for the meeting either by phone, email, or online. A confirmation letter was sent to pre-registered customers a week before the meeting to confirm their registration and as a reminder to attend the event. If a customer declined to attend after receiving the confirmation letter, staff offered customers who had been placed on a waiting list the opportunity to attend.

Long Term Water Supply Priorities

The purpose of this activity was to determine customers' long term water supply priorities. Nine possibilities were identified from previous town halls and community meetings. Each priority was allocated a point system which represented the amount of water needed to sustain the specific purpose. Table 1 shows the priority area, points allocated and description. This information was provided in a meeting folder to participants and was reviewed by staff prior to the topic activity.

Table 1 – Water Supply Priorities and Point Allocation

Priority	Point(s)	Description
Landscaped Medians	1	Maintain attractive, low-water-use landscapes in street medians
Urban Farms / Community Gardens	1	Grow food efficiently in our region
Urban Trees	2	Maintain current trees and plant new ones in parks, medians and privately-owned landscapes
Parks	5	Maintain the current park system and create more parks as the community grows
Athletic Fields	5	Maintain the current athletic fields and create more as the community grows
Golf Courses	5	Maintain the current golf courses in our region
Habitat Restoration & Bosque Ecosystem Enhancement	10	Projects to maintain habitat for endangered species, maintain species diversity, enhance flow in the Rio Grande and protect water quality
Attract High Quality Businesses / Create Jobs	5	Bring high-quality jobs to our region that use of large amounts of water (e.g. computer chip manufacturing)
Water Park	1	Create a large water park in the region

At each table, there were 9 cups labeled to represent each future water use priority. Every participant was provided with 10 glass tokens representing water quantities. Each priority was assigned a point value based on the relative amount of water it would need, the amount of effort to secure that water and the cost to obtain and supply that water. A facilitator at each table led the discussion to allow for participant's input on the priority areas. The facilitator would ask participants what their favorite and second choice was and the reasons for their two choices. The facilitator would also ask what their least favorite use was and the related reasons. The facilitator or staff would capture participant discussion points during the activity.

Participants' Discussion of Water Supply Priorities

Participants were asked to place their 10 tokens in the 9 cups in the middle of the table. Participants were required to place a minimum number of tokens to make a commitment to a specific use. Therefore, if a participant desired Parks and Athletic Fields, he/she would have to commit 5 of the 10 tokens to Parks and 5 tokens to Athletic Fields. If there were extra tokens remaining, then the participant would be allowed to allocate the remaining tokens to their desired priority area. As an example, if a participant chose Parks and Urban Trees (a total of 7 points), and he/she did not want to allocate the three remaining tokens to any of the one point areas, then he/she would be allowed to allocate the remaining tokens to either Parks or Urban Trees in any combination.

After the participants at each table completed their choices for water supply priorities, the facilitator asked for participant reactions to the results. The facilitator asked why a choice was important to the participants and what concerns they might have about an option. After the discussion, a representative at each table would bring all 9 cups and empty them into 9 corresponding larger graduated containers at the front of the room. After all 7 tables filled the larger containers, staff would review the results presenting each priority area by the number of total tokens received in descending order.

Consolidation of Each Table's Water Supply Priorities

Presentation of Consolidated Water Supply Priorities

Figure 1 shows the number of tokens in each of the priority areas. From the cumulative score of the four meetings, Habitat Restoration and Parks received the highest votes, followed by Urban Trees and Urban Farms/Community Gardens. Naturally, Habitat Restoration and Parks received the highest votes because of the larger allocation of water use required for these types of water use. Figure 2 shows that there was more support for Urban Farms/Community Gardens, Urban Trees, and Landscaped Medians based on the number of individual votes. Overall, it appears that participants were more supportive of the two areas of Urban Farms/Community Gardens and Urban Trees based on the number votes received and the amount of water needed to support the priority.

Figure 1 – Points by Priority

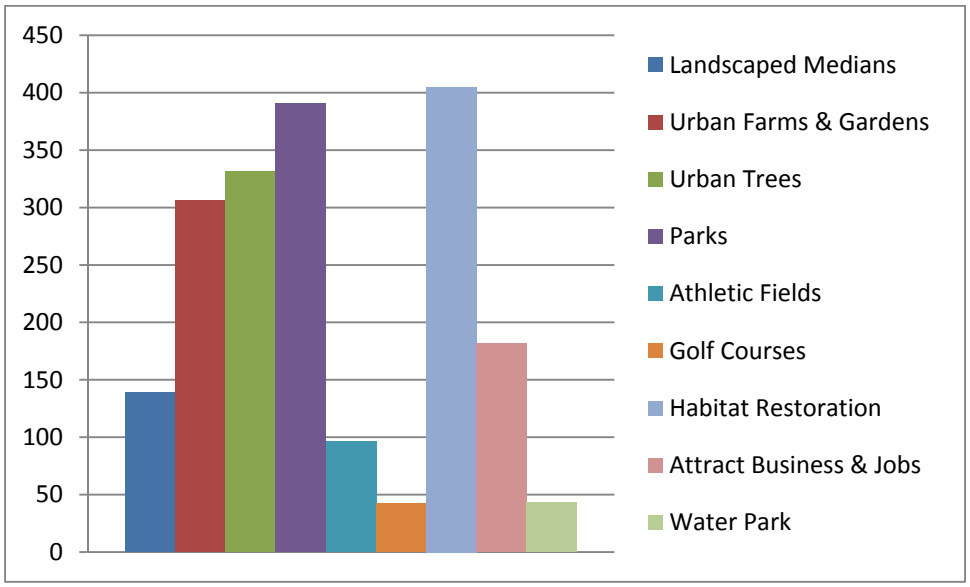
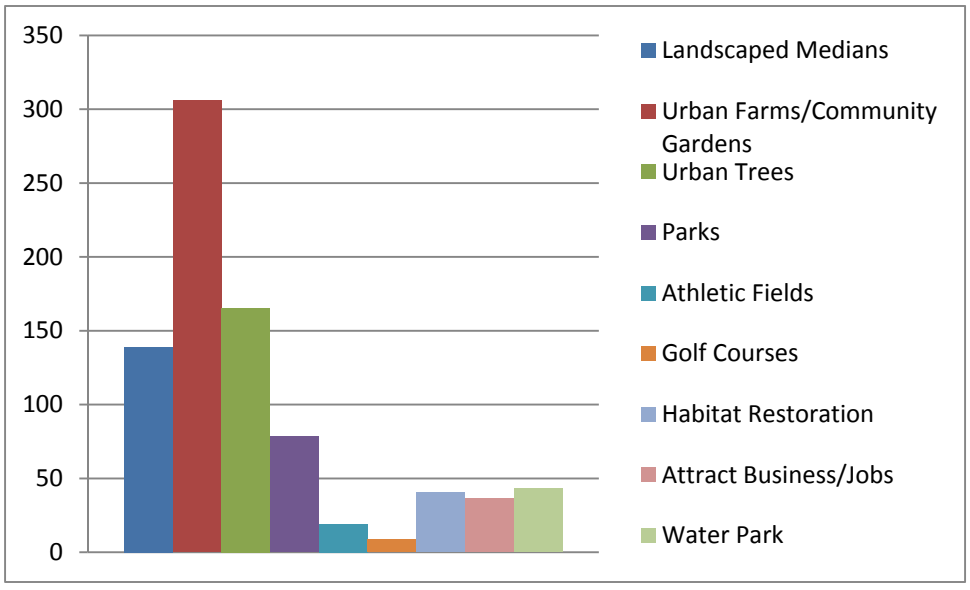


Figure 2 – Point Allocation Ratio



Water Waste Enforcement Program Retrofit

Participants were provided background information and a definition of water waste. Pursuant to the Water Waste Ordinance, it is defined as any water draining off of property for any reason – irrigation, car washing, swamp coolers, pool draining, etc; or watering between the hours of 11AM to 7PM from April 1 to October 31; or creating ice hazards on sidewalks, street or adjacent property. Participants were provided the percentage of water waste by type (malfunction, overflow/overspray, washing, or watering restrictions). They were also provided with the Ordinance's fee schedule in terms of cost per violation. Lastly, they were provided with number of fees collected since 1995 and the number of violations issued by occurrence. Seventy-Five percent of the violations occurred on the first and second offense since 1995 (57% - 1st violation, 18% - 2nd violation).

Staff reviewed with participants eight Water Waste Program changes identified by staff and through customer input. Table 2 describes the eight program changes.

Table 2 – Program Change Descriptions

Program Proposal	Description
View video, take quiz in lieu of fee	A customer, who receives a water waste violation, will have the option to view a video online to learn about water waste and possible corrective actions. The customer would take a quiz at the end of the video and if the customer successfully answers the five questions, the fee would become void. Only one fee abatement would be allowed in a two-year period.
Schedule appointment with staff to correct problem in lieu of 1st fee	A customer who receives a water waste violation will have the option to schedule an appointment to review the infraction and be taught how to correct the problem. If the customer corrects the infraction, then the fee will be voided. Only one fee abatement would be allowed in a two-year period.
Shut off water to parks, golf courses, medians after 5th violation	If a city or county park, golf course, or median receives a 5th violation, the and service will be shut off and the meter to the landscaped area will be pulled.
After 4th violation, customer - Smart Use audit required	A customer, who receives a 4th water waste violation, will be required to schedule a free Smart Use audit. The 4th violation fee will be rescinded upon completion of the audit. If the customer does not schedule an appointment within 30 days, the fee will be doubled on the next water bill.
Link fee to meter size	The violation fee will be linked to the meter/service size so that the fee is comparable to the volume of water wasted.
Water Authority staff help elderly residents with irrigation problem	A customer over the age of 65, who receives a water waste violation, would receive staff assistance in correcting the infraction so that it does not occur again, and the fee will be voided.
Reinvest fees towards fixing water waste at parks/medians	A set-aside of 25% of total fees collected would be applied towards grant assistance to city or county government to fix irrigation problems at parks or medians.
Reinvest fees collected towards education programs	A set-aside of 5% of total fees collected would be applied towards expanding the Water Authority Education Program.

Staff used a tournament bracket approach to obtain feedback on the program changes. The bracket paired similar program changes together. Staff wanted to determine the level of support of the program changes. Staff also wanted participants to prioritize the program changes in order to assist them in implementation of the proposed changes.

Participants' Discussion of Water Waste Program Changes

At each table the facilitator led the discussion using a large bracket chart at the center of the table. The chart, shown in Appendix B, contained short titles of the eight program changes with an associated alphabet letter. As participants worked their way through the "semi-finals" to the final match, they would use the letters to indicate their choices. The facilitator would write the winning program at each bracket level with a vote tally. The facilitator would also record the discussion and reasons for their choices and possible tradeoffs. Once the table completed the bracket, participants were also asked their reactions to the top three program changes. At the end of the activity, the completed brackets were taped to the wall and staff then reviewed the results from each table.

Based on the results of the four meetings, below are the bracket placements for the program changes.

1st Place	Link fee to meter size
2nd Place	After 4th violation, customer is required to receive a Smart Use audit
3rd Place	Schedule appointment with staff to correct problem in lieu of first fee
4th Place	Utilize fees collected towards fixing water waste at parks and medians

CAC Members Review of Results

Water Reuse

Participants were provided background information and a definition on water reuse. They were also informed about the difference between direct and indirect potable reuse. Direct potable reuse is the introduction of reclaimed water (with or without retention in an engineered storage buffer) directly into a drinking water treatment plant, either collocated or remote from the advanced wastewater treatment system. Direct potable reuse can also be defined as the blending of reclaimed water with other sources of supply in a raw water intake pipe prior to treatment of the combined sources. Indirect potable reuse is defined as the augmentation of a community's raw water supply with reclaimed water followed by an environmental buffer or intervening step that precedes drinking water treatment. (Source: EPA 2012 Guidelines for Water Reuse)

Water Authority Plant Division Manager Charles Leder Background Presentation on Water Reuse

Staff described how the water reuse process is the current practice in many parts of the United States. Basically, everyone lives downstream from someone else's treated wastewater. *De facto reuse* is a situation where reuse of treated wastewater is, in fact, practiced but is not officially recognized (e.g., a drinking water supply intake located downstream from a wastewater treatment plant discharge point). Staff also provided four scenarios on different water reuse options that the Water Authority may consider in the next ten years. Diagrams of each scenario were provided to help explain how the process would work. Examples of each scenario in other communities were also provided. Staff reinforced that any option would be about ten years away from planning or implementation. It was also explained that costs and all the pros and cons of each scenario were not known yet, but would be fully evaluated along with community input before the ultimate approach and design are selected. The purpose of this activity is to begin the process of engaging the community on the topic of water reuse and

obtain input on the customer's comfort levels around the four scenarios. The four scenarios included one direct and three indirect potable reuse options shown in Table 3.

Table 3 – Four Reuse Scenarios

Scenario	Reuse Type	Intervening Step
1	Indirect	River
2	Indirect	Lake/Reservoir
3	Indirect	Aquifer Storage/Recovery
4	Direct	Raw Water Pipeline

Staff developed seven multiple choice questions for the four scenarios. Scenarios 2 and 3 included additional time elements of one year and five years. The time element was added to the scenarios that contained the intervening step of storing water in a body of water – either surface or ground. The purpose of the time element was to determine if the comfort level increased with additional time for the reclaimed water to blend with a raw water supply. Participants were asked to assume that the reclaimed water in question meets Federal standards for safe drinking water when it reaches their tap. For each question, the same response level was asked:

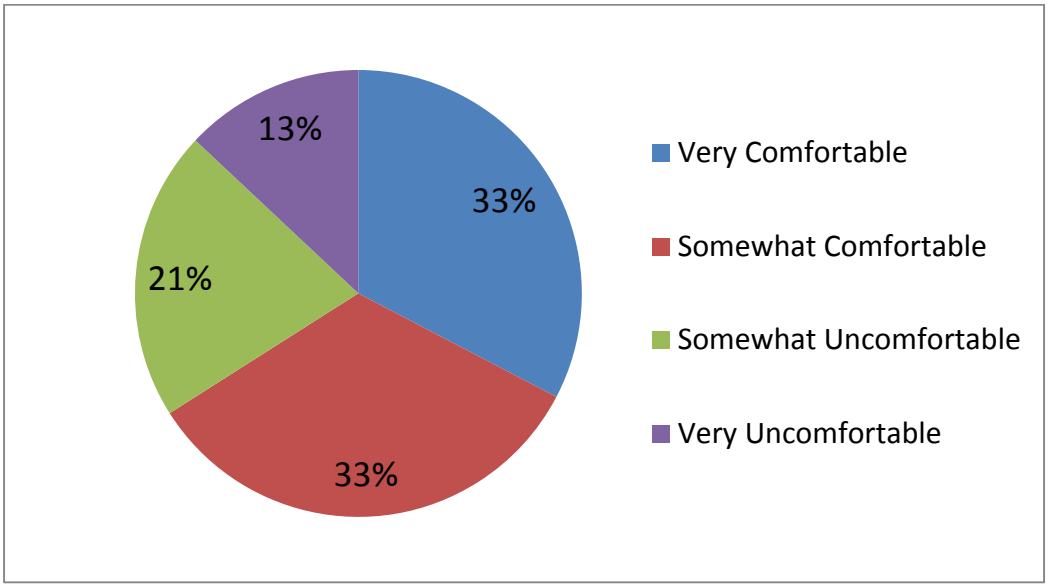
A. Very Comfortable
B. Somewhat Comfortable
C. Somewhat Uncomfortable
D. Very Uncomfortable

The multiple choice questions were projected on a large screen. Staff utilized interactive polling that functioned through Microsoft PowerPoint which allows a live-poll with an audience with questions embedded directly into the presentation. Participants are provided with a hand-held device that allows them to answer the poll question. The device communicates with a receiver plugged into the laptop that displays the presentation. The receiver only collects one vote from each device, but participants are allowed to change their vote before the poll closes. The software allows staff to track poll results by the number of responses received which allows staff when to close the poll. The results are projected in a graph for all participants to see the results of the poll. The results below are from the poll questions that were conducted at the four meetings.

Participants Using Interactive Polling Devices to Participate in Activity

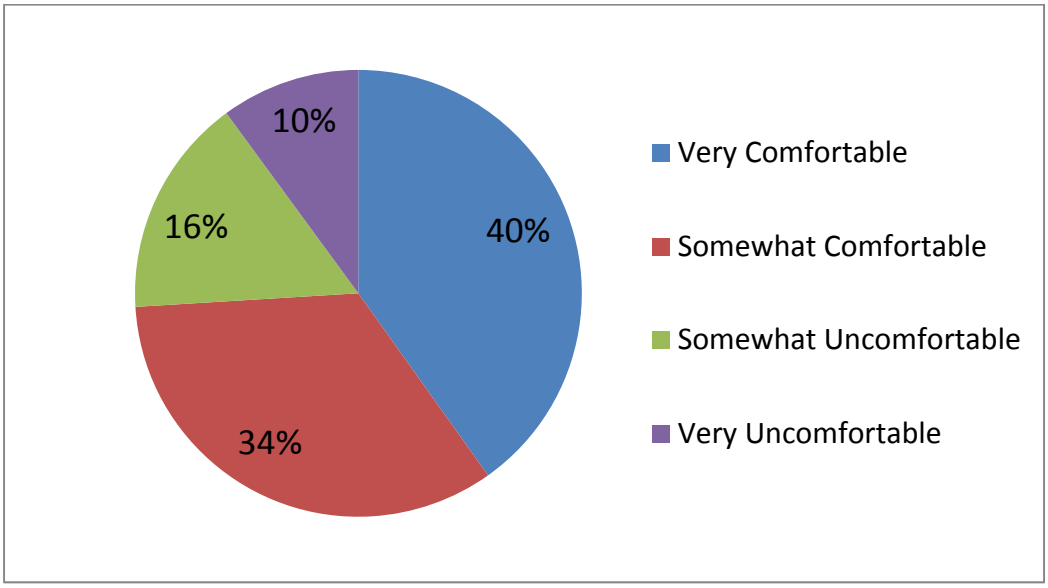
Scenario 1 Results

In Scenario 1, reclaimed wastewater is discharged to the Rio Grande upstream of the diversion intake. Therefore, the river is the intervening step as the reclaimed water blends with the river water before being diverted to the surface water treatment plant for treatment and delivery to customers. Participants were asked their level of comfort of this scenario. From the cumulative score of the four meetings, 66% were either very or somewhat comfortable with this scenario.



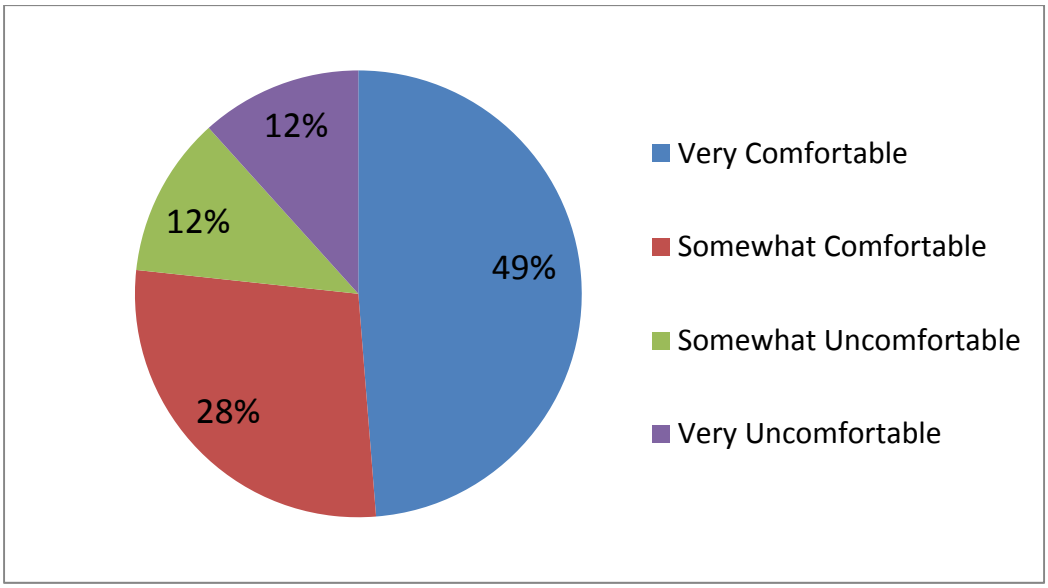
Scenario 2a Results

In Scenario 2a, reclaimed wastewater is injected into the aquifer and stored for a period of one year before being recovered and treated for delivery to customers. Therefore, the aquifer is the intervening step as the reclaimed water blends with the groundwater before being treated for delivery. Participants were asked their level of comfort of this scenario. From the cumulative score of the four meetings, 74% were either very or somewhat comfortable with this scenario.



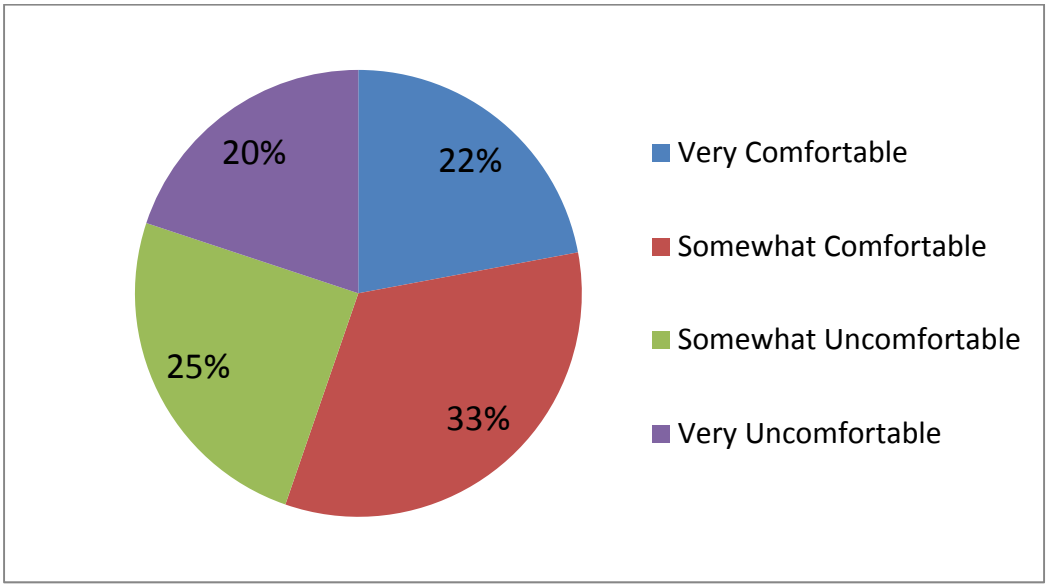
Scenario 2b Results

In Scenario 2b, reclaimed wastewater is injected into the aquifer and stored for a period of five years before being recovered and treated for delivery to customers. Therefore, the aquifer is the intervening step as the reclaimed water blends with the groundwater before being treated for delivery. Participants were asked their level of comfort of this scenario. From the cumulative score of the four meetings, 78% were either very or somewhat comfortable with this scenario. Therefore, there was slightly more support to store the reclaimed water for a longer period of time in the aquifer.



Scenario 3a Results

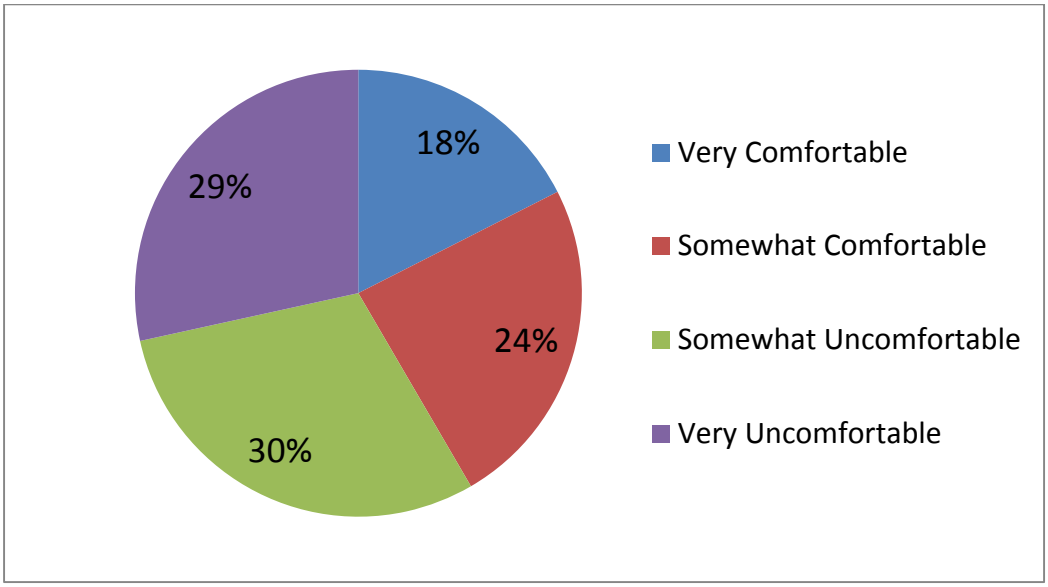
In Scenario 3a, reclaimed wastewater is discharged to a nearby lake or reservoir for a period of one year where it would blend with the surface water as the intervening step before it diverted to the surface water treatment plant for treatment and delivery to customers. Participants were asked their level of comfort of this scenario. From the cumulative score of the four meetings, 55% were either very or somewhat comfortable with this scenario.



Scenario 3b Results

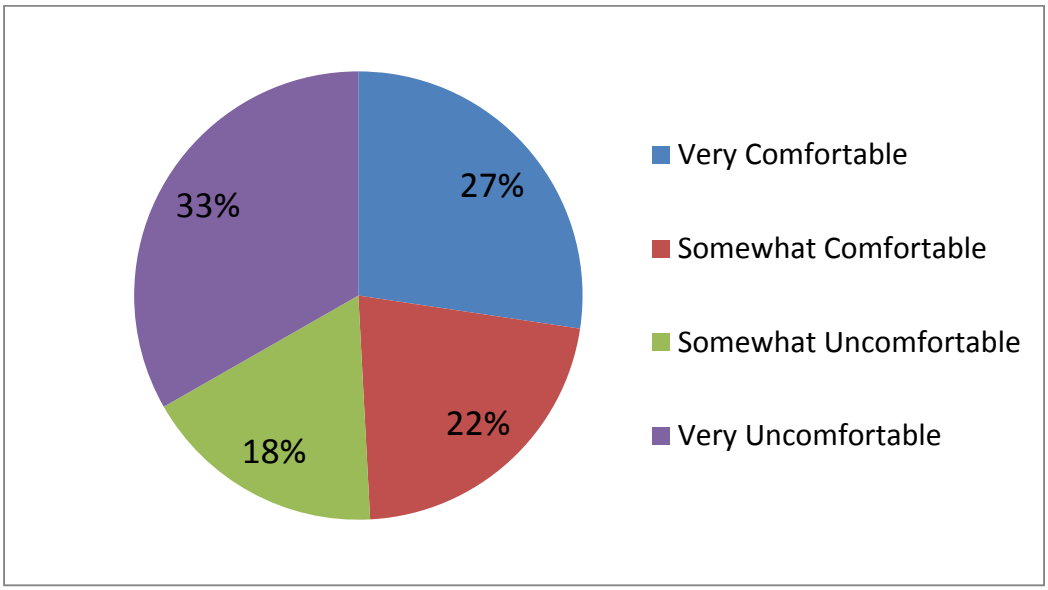
In Scenario 3a, reclaimed wastewater is discharged to a nearby lake or reservoir for a period of five years where it would blend with surface water as the intervening step before it diverted to the surface water treatment plant for treatment and delivery to customers. Participants were asked their level of comfort of this scenario. From the cumulative score of the four meetings,

42% were either very or somewhat comfortable with this scenario which 13% less than Scenario 3a. Many participants felt there would be more evaporation with this scenario and would, therefore, reduce any benefit of storing reclaimed water in a body of surface water.



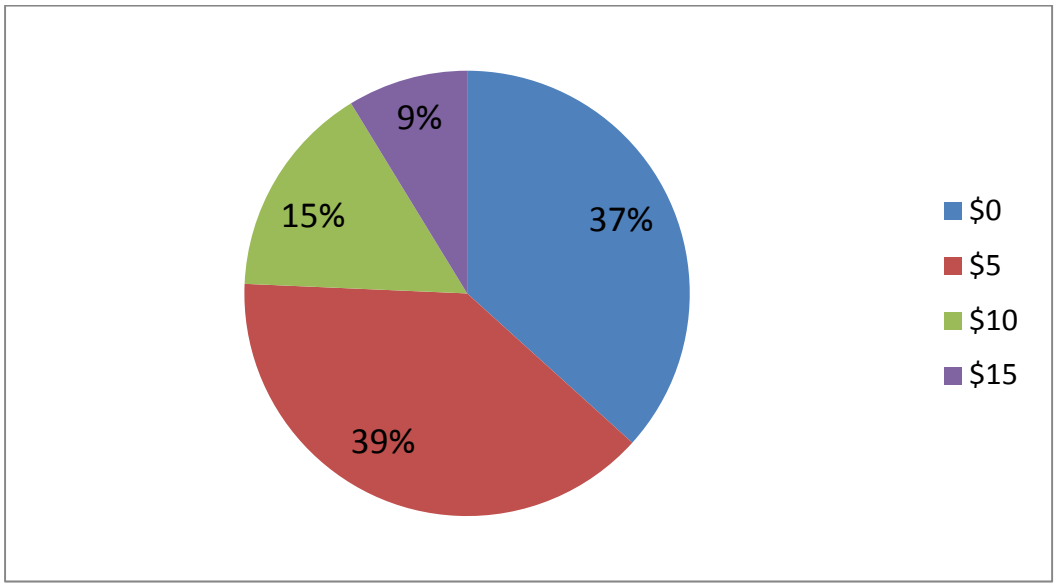
Scenario 4 Results

In Scenario 4, reclaimed wastewater is diverted in a pipeline that connects to the raw surface water pipeline that flows to the surface water plant for treatment and delivery to customers. In this scenario, there is no intervening step such as those presented in Scenarios 1 through 3. Participants were asked their level of comfort of this scenario. From the cumulative score of the four meetings, 49% were either very or somewhat comfortable with this scenario.



Willingness to Pay

After reviewing and scoring the different scenarios, participants were asked how much they would be willing to pay per month to help build a reclaimed water system. From the cumulative score of the four meetings, 37% did not want any additional rate increases to build the system. However, 39% were willing to pay an additional $5 per month to the build the system. Another 24% would be willing to pay $10 to $15 more per month to build the system.



Summary

Overall, the majority of meeting participants were more supportive of Scenarios 1 and 2. With Scenario 1, it is basically the de facto reuse situation described earlier with the exception that the Water Authority would be reusing the water several times instead of sending it downstream without the additional beneficial use. About three-quarters of the participants supported both Scenario 2 options, and there was a slightly more support (4% more) for Scenario 2b which stored the reclaimed water for a period of five years instead of one year before being recovered and treated for delivery to customers. Participants were somewhat supportive of Scenario 3, but were less comfortable in storing the reclaimed water in a 5-year time frame in which there would be more evaporation. Participants were basically evenly split in their support of Scenario 4. Of all the scenarios, Scenario 4 received the highest "Very Uncomfortable" rating at 33%. Scenario 2 received the highest "Very Comfortable" rating with 40% for 1-Year storage and 49% for 5-Year storage. Scenario 1 received the third highest "Very Comfortable" rating at 33%.

This information will be used as a building block in developing the Water Authority's reuse planning efforts. As the utility progresses in developing plans, it will use a triple-bottom-line approach to evaluate different alternatives. Moreover, the utility will learn from the experiences from other utilities that are in the process of constructing and operating direct and indirect potable water reuse systems.

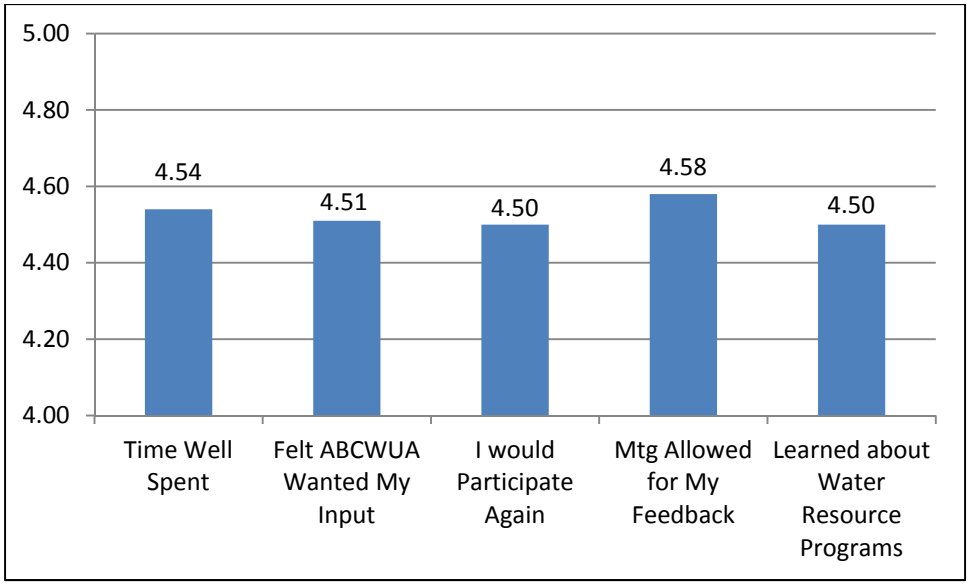
Customer Feedback – Meeting Evaluation Forms

At the end of the meeting, staff asked for feedback on the meeting and process. Participants were asked to rate five statements on a scale of 1-5 with 1 being you don't agree and 5 being you completely agree. The five statements included the following:

1. My time was well spent
2. I felt the Water Authority truly wanted my input
3. I would participate in this type of session again
4. The meeting structure allowed participants to provide feedback
5. I learned something about our water resources and programs

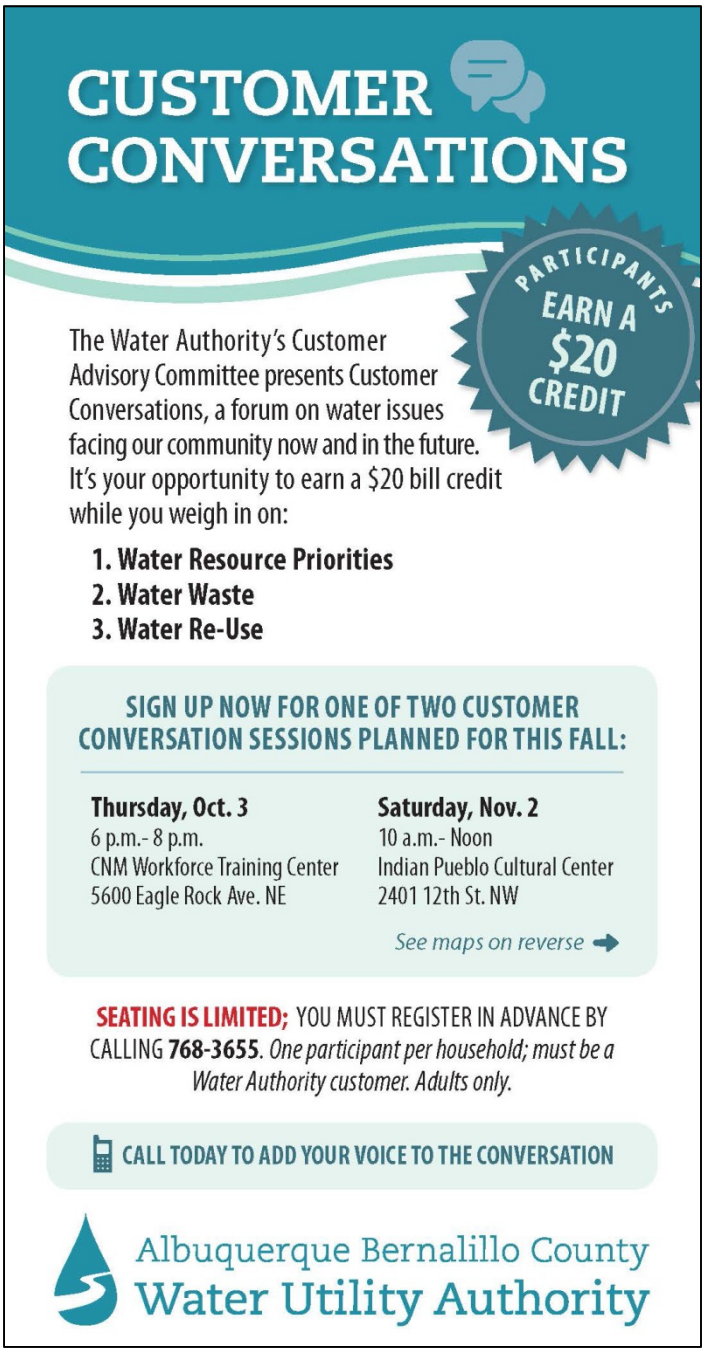
From the cumulative score of the four meetings, participants rated these five areas 4.5 or higher on a scale of 1 to 5.

Figure 3 – Meeting Evaluation Scores

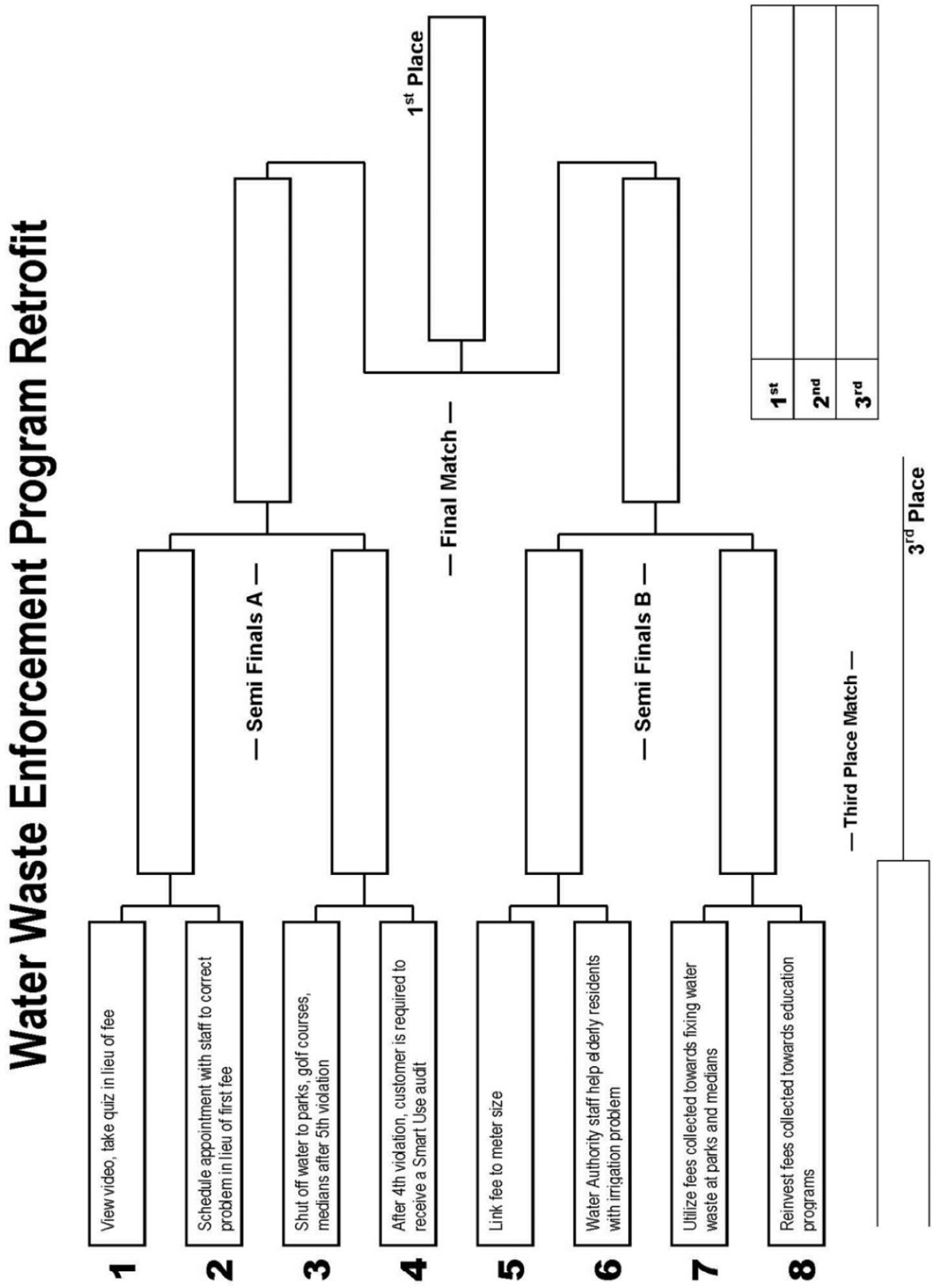


There was also space on the form for participants to provide written comments on the meeting or other water topics. General comments are listed in Appendix E.

Appendix A – Bill Insert



Appendix B
Water Waste Enforcement Program Retrofit Tournament Bracket



Appendix C
Future Water Resources Priorities
Comments

October 2, 2013 Meeting

Favorite

- Jobs - by far the most important
- Jobs - need more jobs in Albuquerque
- Jobs - need more employment and new companies
- Urban Farms - want farms around town
- Trees - trees/ habitat for birds/ shade/ fruit trees for food
- Trees - put trees in when the City does new road/other projects : like 1% for arts- but for trees
- Trees - like putting in trees at "BIG I"
- Water Parks - important-miss the beach- use to take kids and neighbors
- Golf Courses - because am a golfer;
- Bosque - habitat is important and because nobody else will support it
- Urban Farms - too much food comes from far away distances
- Medians - because the city looks attractive
- Parks - because that is the only thing green around
- Habitat - the Bosque is the only habitat around
- Trees -provide needed shade and cooling in the sunny SW
- Parks and Golf Courses - use them a lot
- Bosque and Urban Farms - protect the river and local garden provide local produce
- Medians – look good and don't use a lot of water- provide scenic routes and is calming to drivers
- Combine Parks, Urban Farms, Trees - why not have all three and make it fruit trees not just trees – 3 in 1 (multi-use)
- Urban Farms - like the local aspect of food production - too much globalization – like shopping at Farmer's Markets - produce tangible goods while other options are just "nice to look at" - produce better quality, more nutritious food
- Bosque - need to maintain the Bosque, especially after seeing low flows in the river this summer
- Trees – concerned with trees dying in their neighborhood
- Jobs - concerned with unemployment in their community
- Bosque - half of our drinking water comes from the river – provides fish, trees, recreational life, and aesthetics
- Trees - trees provide a cooler local climate and improved air quality - aesthetically pleasing
- Medians - aesthetically pleasing - can use Xeriscape landscaping in medians
- Parks - aesthetics - need some green space, even in a desert
- Urban Farms - good for teaching kids about where their food comes from
- Trees - provide increased shade, makes NM prettier, attracts people to NM, cools us off

- Jobs - increase tax revenue, allow us to be sustainable
- Parks - used by everyone
- Bosque - attracts jobs - gives shade -"I want my granddaughter to be able to experience the former glory of the river"
- Trees - similar to habitat
- Medians - they don't use that much water
- Bosque - I love the green trees and water

Least Favorite

- Bosque - did not necessarily oppose the Bosque but with 10 drops requirement could not express interest in other amenities.
- Golf Courses - high water consumption - so few people who use them
- Water Parks - contamination/water quality challenges
- Medians – waste of taxpayer money – just use rocks and artificial turf
- Athletic Fields- other ways to get exercise
- Jobs – those that use a lot of water
- Water Parks – might be ok if there was one water park and eliminate some outdoor pools
- Golf Courses and Medians - not enough community use to justify golf courses and medians - not an efficient use of water
- Golf Courses - use too much water, benefit only a few and aren't used year round
- Water Parks - expensive and are a rip-off to kids and their parents
- Water Parks -we live in a desert - it's wasteful - it's insignificant
- Golf Courses - only a few play golf - too much water for just grass
- Medians - not useful
- Stop being so hard on customers, allow more water to be used in the yards
- Water Parks, Golf Courses, Athletic Fields – should be privately funded

Group Reaction

- Seems arbitrary that you can't split up votes
- Putting all 10 in Bosque is important, but medians also provide beautification
- Concerns with lumping all landscape medians together-some are water wasters but we could put out plants and rocks that still look nice without water-there are so many ways to landscape medians
- Loves the pots and sculptures surrounding the freeways now - all we really need to do is get rid of weeds -maybe we could be creative

November 2, 2013 Meeting

Favorite

- Bosque - to maintain habitat is everything – something for everyone to use – a good use of water
- Jobs - need jobs and tax dollars - if there are no people, no need for parks etc.
- Concerns about big price tag to put all 10 into the Bosque

- Parks and Jobs - amazed at the number of people that use parks - many don't have backyards - attract top quality businesses - although the high water use is not attractive
- Parks and Urban Trees - denote that the city has a good quality of life
- Urban Gardens and Medians - bring in people and new businesses into the city
- Parks - neighborhood parks are well used.
- Urban Trees – help as CO2 sink
- Urban Trees – are great for walking but need maintenance
- Jobs - without them nothing else matters
- Urban Trees - great for walking but need maintenance
- Medians - restore the southwestern feel
- Bosque and Urban Tress - but also ensure that we have good quality water
- Medians - make the city pretty
- Parks - people don't all have yards – a place to go
- Athletic Fields - for children
- Like low maintenance landscapes – xeriscape
- Urban Farms - look nice and give a person a sense of fulfillment
- Urban Trees - need to keep them up
- Parks - effects of draught is noticeable and parks provide relief
- Athletic Fields - bring children outside
- Jobs - need high quality jobs to support the economy
- Xeriscaping is acceptable considering where we live
- Parks and Medians - make Albuquerque attractive
- Parks - supports wonderful city environment -oxygen exchange, cooling effect, good for the health of the City - beneficial to the entire community
- Bosque - need to protect the Bosque because we would not be here without the river (i.e., this area would not have been settled)
- Urban Trees – concerned with trees dying or being removed in their neighborhood
- Jobs - concerned with unemployment in their community
- Bosque - need to understand more what can be done with the Bosque
- Bosque - we live in a desert and the Bosque is attractive
- Athletic Fields - important for youth
- Parks and Athletic Fields - don't like to see dead trees
- Parks - important for children - has lived in cities that do not have parks - great place to enjoy time
- Urban Trees - like trees for shade and beauty - help with birds and air
- Golf Courses –do not want golf courses to dry up like in Rio Rancho
- Urban Farms – people are able to grow vegetables - good for the community - makes it green and pretty - brings flowers - creates jobs - we can eat from our own land
- Landscape Medians – beautify the City

Least Favorite

- Golf Courses - once managed one and all they do is gobble the water- few play golf - consider example of Ft. Bliss where they use synthetic lawns that use zero water

- Jobs - concerned about rumors that Intel is poisoning the water supply - afraid of industry
- Water Parks - will not ever go to the water park - already have a water park
- Parks - use so much water
- Athletic Fields -use a lot of water
- Golf Courses - Puerto Del Sol golf course – wastes water - not utilized very well
- Water Parks - we live in a desert - may be ok with reclaimed water
- Athletic Fields - should go to astro turf to save on water
- Golf Courses - need to target golf courses to reduce water
- Water Parks - not a good use of our water resources
- Athletic Fields - use more artificial turf to reduce water use, chemicals, and maintenance costs
- Bosque - restoration is a luxury
- Golf Courses - high water consumption -so few people use them
- Bosque - uses so much water
- Golf Courses - there is not enough community use to justify golf courses
- Athletic Fields - not a good use of water, but you can use artificial turf in lieu of grass
- Water Parks - "we live in the desert" so not a good use of water.
- Urban Farms - one individual felt that local farmers misuse water
- Golf Courses - concerned about the smell of reclaimed water on golf courses

Group Reaction

- Looks like parks have the most support
- No support for athletic fields or Bosque - perhaps the public is not that informed as to the importance of Bosque restoration – perhaps there is some backlash against trails by nearby residents who believe that it should be left natural – the Bosque needs to be protected from fire
- Use medians as urban farms

January 16, 2014 Meeting

Favorite

- Bosque and Parks - being outside, walking, green space, oxygen, family outings
- Jobs - attractive high quality jobs, high paying jobs, help feed and support families, keep degree earners in NM - would support Bosque, but too many points
- Bosque - improves parks and nature centers - supplies acequias for irrigation - supports our water-table, habitat and life
- Urban Farms - supports local foods and irrigation
- Bosque - affects rest of the state – crops, ecosystems – widespread implications
- Bosque - most unique feature in Albuquerque
- Trees - many dead trees around Albuquerque, need the shade in the summer
- Bosque and Urban Farms - sustain local community
- Medians - brighten day, uplifting
- Urban Farms - trees help improve the environment, create more rain, beautify environment - beekeeper likes the gardens for his bees

- Trees - help control erosion - sad to see dead trees around town
- Bosque - maintain for the animals that live there
- Athletic Fields - kids need a place to play - helps them stay healthy
- Parks - recreation is important - help with the absorption of water - put moisture back into the atmosphere -help lower the temperature - provide respite and beauty for the neighborhood
- Should consider storing extra water (up to 60%) before using more on any of these activities
- Parks and Urban trees - likes to walk in the shade and see the trees - it's relaxing
- Trees - creates beautiful green areas, helps make our city nicer, but not Weeping Willows
- Trees - or put more trees in the parks. Makes the area more enjoyable
- Trees and Landscaped Medians -makes ABQ a nicer place to live
- Urban Farms - we have Master Gardeners to assist (this person is a Master Gardener)
- Parks - help keep the air clean which helps stop pollution
- Golf Courses - if designed differently to use water more wisely
- Bosque - it's part of our culture - plus urban trees
- Urban Farms – helps us to eat locally; provides more value for $$ (# of drops)
- Trees – help with cooling; provide beauty
- Bosque – unique feature of our area - river is critical to our ecosystem
- Parks – used a lot; animals and children use (playgrounds); everybody can access – benefits more people
- Athletic Fields – most of the population benefits
- Bosque - "because my soul would die if the river ran dry or we did not have the Bosque" -we need to preserve the Bosque and keep it for the next generations
- Urban Farms - my husband is a gardener and we sell our produce -the small farms are what make New Mexico what it is - the produce is organic, important for our health - small farming is a way to get organic produce
- Residential Plants and Trees -like to see local homeowners be able to keep trees and their plants - over the last 10 years people have let their front yards dry up, no more shrubs or plants – due to high water costs
- Jobs - in the current economy we need more businesses to come to Albuquerque to create more jobs
- Jobs - the problem is not availability of water but the lack of quality education
- Urban farms, Urban Gardens, Trees - every priority had received at least one vote except golf courses
- Trees, Urban Farms, Parks – the clear choices
- Urban Farms - are going to become more important as transportation costs increase in the future - healthier foods - gardens bring people together, and crops can be donated to the elderly
- Trees - cool the landscape and streets - have invested in the canopy of trees over decades, and should protect it - maintaining the current urban trees, but in new

development, have draught tolerant trees that may not have the same shading qualities, but use less water

- Jobs - because if we don't have a strong economy, we won't be able to protect the water or environment
- Jobs-we need more jobs!!
- Urban Farms - need food to be grown nearby - good for ABQ culture
- Tees – shade – aesthetics - we need more trees!
- Bosque - only have one Bosque- it makes ABQ special -essential to feed the area's culture -need to enhance the flow and thereby protect water quality - need to maintain species habitat and diversity
- Medians – make ABQ more aesthetic and attractive - low water use (takes only 1 marble)
- Athletic fields - Encourages fitness - HOWEVER, need to maintain what we build – not spread ourselves so thin that we allow some fields to degrade
- Parks - given that more people have planted xeriscapes and eliminated grass, they need an 'oasis' - important for neighborhoods – builds community - HOWEVER: see too much water waste at parks - need more investment in parks

Least Favorite

- Golf Courses - seems wasteful and unnecessary – don't provide recreation to as many people as parks – exclusive(recognize that some members of economy engage in business on the golf courses)
- Water Parks - not multiple benefits the way that parks with trees provide – both recreation and aesthetic benefits
- Water Parks - waste of water
- Water Parks -need to invest in other choices first
- Water Parks - we live in the desert, need to promote desert-friendly activities
- Water Parks -need other options more
- Golf Courses - don't golf, waste of water
- Golf Courses - use a lot of water, need fewer courses
- Golf Courses - use too many points that can be allocated elsewhere
- Medians - can decorate the medians without water, e.g. rocks, glass, etc.
- Water Parks and Medians - waste of water
- Jobs -not wise to try to attract businesses that use a lot of water, consider attracting businesses who don't require large amounts of water
- Golf Courses - all at the table resounded that they think golf courses are extremely wasteful, particularly in a desert – not well maintained, lack efficiency
- Golf Courses - as currently designed
- Bosque - it's too big - beyond capability of the City
- Golf Courses - not accessible to everyone - people who use them should pay more
- Water Park -fewer people have access
- Jobs -they should get tax breaks for doing business here - businesses should come up with better processes that use less water
- Athletic Fields – concern about amount of resources they take

- Athletic Field - don't have kids - enough available
- Water Parks - no need - food is more important
- Golf Courses - New Mexicans can't afford to play golf - one in the group played golf but agreed we have enough golf courses - they are not crowded
- Jobs - at Intel water is being used or wasted during the manufacturing process
- Golf Courses - the large amount of water needed for watering a golf course is not justified
- Golf Courses - should only water the greens
- Bosque and Jobs - seem to be too costly in terms of water use - a modified Bosque restoration using less water would be more acceptable - however, one gentleman did express that he wished this community didn't export our children and grandchildren to other states to find good jobs

Group Reaction

- Everyone thought golf courses wasted lot water even though I explained how they use reclaimed water! Perception is everything!
- Rio Rancho's experience with Intel regarding water use and jobs came up several times. Intel's positive economic impact is not worth the amount of water getting used.
- Athletic fields would have received more support if the water cost wasn't so high. A modified approach to building fields, but using less water would have been supported.
- Initially, a water park was supported by the group because of the relatively low amount of water usage. However, once the conversation turned to the vast amounts of energy needed for operating the park, the priority of a water park dropped dramatically.
- Don't want to attract more people to move here but want to keep degree earners local.
- Need an option to conserve all extra water
- Increase user fees for activities such as golf – i.e. a tax on high water activities (golf, water parks)
- Provide rewards/finder fees for those residents who report water waste

March 26, 2014 Meeting

Favorite

- Urban Farms - healthy food, community involvement, and less energy used to ship food
- Jobs - need for quality jobs to provide a tax base to improve the community - young people are leaving the area for better opportunities elsewhere
- Medians - popular because of the low water use, and aesthetic value they bring - more bang for the buck
- Urban Farms - self-sustaining community and economy, cooperative effort
- Trees - keep down dust, cool the area, bring moisture
- Urban Farms - bring food and water - sustain life
- Trees - maintain existing trees – create micro-ecosystems
- Urban Farms - get something back, investing in community
- Urban Farms - food at grocery stores travel a long way and are infected with pesticides and preservatives
- Trees - process CO2 and create O2, maintain in Albuquerque

- Medians, Parks, Urban Farms - these allocations supported the community
- Save the water, period!
- Parks and Athletic Fields - unanimously supported by small group and seen as the same investment
- Parks - Albuquerque should invest in the bigger parks and maintaining them- adding more to them rather than putting more money into the small, “pointless” parks in neighborhoods
- Parks – should primarily invest in low income Urban Farms - important access and opportunity for those in poverty - invest in options that provide access and opportunity to *everyone* in the Albuquerque community over those options that might fit a more exclusive niche
- Parks - offer a variety of activities for all age groups -parks help families and communities stay together and have a free place to go
- Urban Farms - give people the opportunity to grow organic - people can buy healthy food - create income for local producers
- Athletic Fields - a big part of family life, kids stay out of trouble when they play sports
- Jobs - unemployment is rising and we need to create new jobs - bring new businesses to Albuquerque
- Bosque - we need to preserve the Bosque -can’t lose animal life
- Trees - have a big influence on rain - we need to have more trees, preferably native trees and shrubs that use less water - have a cooling and calming effect - bring life to an area
- Urban Farms - provide practical growing options - allow people to have a little space - can help with NM’s high hunger rates
- Trees - as long as there is a focus on planting more desert like trees - trees provide shade
- Bosque - the animals and plants were here before us, we should support their continued growth
- Parks - useful for large populations - provide green and recreation
- Jobs - employment is important to the state - can teach businesses to conserve water
- Water Parks and Athletic Fields – important for families and kids – consider using artificial turf on some fields
- Medians - makes you feel good about your community - but need better management – water conscious planting, growth, etc.
- Parks - green spaces are important but would like to see more water-wise grass and plants put in
- Jobs - son left ABQ after graduation because he couldn’t find a job -would like his son to be able to stay here
- Urban Farms - provide the experience for those of us who don’t know about farming
- Medians - nice for visitors - reflect well on ABQ

Least Favorite

- Bosque - because of the high volume of water used - water needs to be used for the residents
- Golf Courses - golf courses are a waste of water and should be private entities
- Water Parks - they should be private facilities
- Medians - a luxury - neighborhoods and customers should come first
- Golf Courses - should be self-sustaining - golfers should have to pay for water costs
- Golf Courses - too much grass - use too much water - see many sprinklers with water running down street, etc.
- Golf Courses - waste of water that could go to growing food
- Bosque - water just runs down to Texas
- Golf Courses - a worthless investment - too exclusive and expensive - however, one woman noted that they are very well used and therefore serve the community
- Bosque - didn't want to invest all of their marbles in it or didn't understand its significance/usefulness to the community
- Bosque - serves no other purpose than a fire hazard
- Bosque - a lot of resources are currently going into the preservation of the Bosque - it's already taken care of
- Water Parks - no need - they had one on Montano and it closed
- Golf Courses - there are enough - a luxury, other uses are necessities
- Jobs - not wise to try to attract businesses that use a lot of water, consider attracting businesses who don't require large amounts of water
- Golf Courses - all at the table resounded that they think golf courses are extremely wasteful, particularly in a desert – not well maintained - lack efficiency – few people benefit
- Water Parks - not essential to the community
- Golf Courses -would be okay if water-wise grass was used
- Medians - use rocks instead of plants that need so much water
- Medians - the rocks make the city too hot

Group Reaction

- Need to do all of these! Everyone wants different things, try to accomplish all!
- Keep excess water in the aquifer (store, don't use)
- Trees and grass create Oasis in the desert
- The members said that they were glad that there was discussion prior to allocating their water beads. It resulted in some of them making better choices.
- Nice discussion around topics but the group was in agreement on each issue and satisfied with the final results - felt that necessity has to come before 'nice to have' - such as water parks or golf courses
- Group was surprised at the thought diversity around the table – each individual really did have different priorities for water allocation.

Appendix D
Water Waste Enforcement Program Retrofit
Comments

October 26, 2013 Meeting

Comments

First Round

AB Pairing

- A - people could go to library or call ABCWUA if they don't have a computer
- B - more face to face with the person with the problem
- B - concerns about B because people may not pay attention
- A - easier to go in and watch a video-more convenient for the customer
- A - People do not have time for a face to face-it should be convenient for people to view video (More than 9-5, Saturday options example)
- B - because one on one is more constructive- important to discuss and get a professional viewpoint
- A and B - depends on the size of the violation
- B - had the experience and it was very helpful
- B - concerns about A - too easy to get off the hook - will ignore what they learned and keep violating
- B - most participants thought that the appointment would provide interaction that was likely to be more valuable and educational than the video
- A - less expensive and easier to schedule-advised adding a nominal fee ($5-$10) in addition to the video
- B - some thought in-person would be more effective, even if more expensive than A - good choice for those without a computer
- A - it is very expensive to send people out to homes - if they don't have a computer they can go to the library - our water cost is already too high, so don't hire new people - you can do it anytime, not just 9 – 5 M-F – if it's too difficult to get through to the Water Authority to make an appointment (based upon her difficulty getting signed up for this event), it would be too difficult to get signed up for a personal consultation too
- B - personal consultation is better- computers won't change anyone's behavior - people are more instructive and can answer questions - it's more punitive to have to schedule a person to come out and meet face-to-face
- The consensus was that Option A did not provide enough of a deterrent-some felt that D was too harsh and that C would result in damaging trees and unsightly, dead grass and lower property values for neighbors
- B - would change my behavior – not sure if I am comfortable that it is in my home
- B - would be more effective but more expensive but may be the better answer
- A is better because B is much more expensive
- B - more compliance
- Would like other options for comparison

CD Pairing

- C - people do not like “audits”
- D - more educational
- Add a sign at the park notifying residents about the fees and when the water will be turned off in order to let the public know that the park is in violation
- D - concerns about C because don’t want to see vegetation going dead- on the other hand it might be an effective notice to the neighborhood
- Would like the number of violations to be much lower before C & D kick in
- D - most participants did not like the idea of shutting off parks
- C - felt this option was “cutting off your nose to spite your face” - dead parks and golf courses would also negatively impact adjacent property values
- D - felt it would educate the public more- some concerns that poor customers couldn’t pay
- C - they’ll stop wasting water - but it needs to be after the third violation - businesses will correct their behavior because it they will have to correct it
- D - Smart Use Audit-we already spent money on the parks and we need to support the parks instead of killing the plants - we shouldn’t turn off water to parks because it’s too expensive to replant them - we shouldn’t let the grass die
- Neither C versus D - both are futile and what we really need is public outrage by publicizing the businesses and government agencies that are wasting water
- D - otherwise you are shutting off city, resulting in a brown park
- D - wiser, because after 4 violations, then the problems can be pinpointed
- D - more money invested in parks, to cut off water is wasting that investment
- D - is better, but why double the fee
- D - meter-free audits are best

EF Pairing

- E - like idea of penalty/ fines based on volume of water lost
- Did not see connection between comparison - very different issues and hard to compare –confusing
- E- because sounds fair
- F - why not
- E - currently big users pay the same as little guys, this seems unfair
- E - concerns with F because there are city programs to assist seniors- work through them instead of Water Authority
- E - most participants felt that bigger companies and properties should pay more than small residential properties- consistent with the actual volume of water wasted
- The pairs are too different for a meaningful comparison
- F - this option was favored, but should not be limited only to those over 65

- E - if you use more water, then your fines should be bigger to feel the punitive effect - the elderly need to get help from their kids or neighbors, not the Water Authority
- E - although inclined toward helping the elderly because participant is elderly, behavior change in E is better for society (should be more effective)
- F - don't like link to meter size, however-customer was charged for many years for the wrong meter size - always fought it and finally received a refund (but only back 5 years…due to "statute of limitations")
- F - soft on the elderly
- F - meters size doesn't have anything to do with use
- F - it is right to help our older citizens
- E - not all elderly need help, link to water meter size (auto dealers in her area are wasting water)

GH Pairing

- H - G is the City's responsibility
- H - education programs are good and always important- not just for kids
- H - outreach to new residents who do not know about water conservation
- G - how about xeriscaping parks so there is no waste
- G - the City appears to be the biggest offender
- G - felt it would educate and make people (City) aware of how to correct the problem
- G - this actually accomplishes something positive
- G - we don't need to waste money on education – schools should be teaching our kids
- H - smart to educate the youth with understanding the importance of water
- H – G is a big mistake, sends the wrong message– Water Authority will be left with the bill

Second Round

- We need to address the 7,000 first time offenders.
- We need to address the commercial versus the residential – it matters which it is because of the amount of water used, therefore, we need to focus on commercial and government
  Agencies
- G - fixing parks/medians has a greater impact because linking meter size won't fix the problem
- E - big guys use tons more water, so their fees should be higher
- G and E - we should link meter size to fees and use the money to fix parks/medians

Final Round

- E - if we could fine the biggest violators with the largest meters we could fund more education and fund more fixes at parks & medians
- E - this one change would have a significant impact on preventing water waste

November 2, 2013 Meeting

Comments

First Round

A B Pairing

- A - more customers would do this – will learn how to set up system - cost effective - convenient-7000 first time violations – hard for the water authority to have staff to conduct the audits
- B - face-to-face has more impact than online - can be a waste of time just to get the credit, but no learning - need to have someone come to the house to really have a change -shouldn't be in lieu of a fee - the consequences are known out front
- Neither A or B - the participants felt that people should be fined -no holding hands -
- Does this apply to fundraising car washes? Lots of water is being wasted.
- A - no staff involved
- B - education is better in person
- B - would work for all whereas need a computer to watch a video – you pay more attention to a live person
- B - the appointment would provide interaction that was likely to be more valuable and educational than the video
- A - some people don't have computers
- B - hard to schedule appointment
- A - think people need more education rather than just a fine - it's like driving school & it's more convenient - easier to do -this is the one if people are responsible
- B -better to talk to someone about the problem

C D Pairing

- C - more immediate consequence- more water is being wasted - need to get them to fix it immediately -our tax dollars are paying for that run-off waste - would like to have parks watered but would shut off golf courses
- D - refer for education instead of punitive approach - might have more influence
- D -overwhelming support, easier and economical - education is key to successful change
- C - shut them down – the only way to get D- did not like the idea of shutting off parks - they also felt the audit would be very educational
- C - fourth violation seems like a lot - should be done after two
- D - shutting off penalizes the community more than the City
- C - parks should know better - shows some action that will require a reaction on the part of the violator
- D - it is better to be told how to improve - this one has some corrective action

E F Pairing

- E - violators wasting more water should have larger fine
- F - nice to help elderly, but others could use the help too
- F - may have staff costs
- E - seems fair

- F - elderly need help
- F - bigger companies and properties should pay more than small residential properties but choose F because seniors have trouble affording repairs on a fixed income -maybe low income folks should also qualify for this service - there needs to be more than just advice such as access to lower contractor rates or the ability to pay though the water bill
- E - commercial users should pay more and increase fee
- E - there are more businesses and they are more destructive
- F - there are a lot of poor elderly people - we need to help the older folks because we will all be there eventually

G H Pairing

- G - lots of medians have water systems - need to repair and maintain parks and beautiful trees - let's get after the problem
- H - love idea of school programs - like to see education expanded – adults too
- G - 5% is not enough, but gets us towards fixing the problem
- G - parks are really wasting a lot of water – there is already enough education – need more immediate action – need to fix the problem – education should start at home – we need something we can measure
- G - since the City appears to be the biggest offender the group felt it would be best to spend money on fixing this issue
- G - but why not do both
- G - fix it and help the city
- H - I have kids in school - make the kids realize the waste – need to educate to understand concepts

Second Round

- C - need to get after the problem-the largest waste
- E - make them stop doing it first - preventing the waste in the first place is critical
- C - it affects the entire city
- B - is personal
- B - education upfront would eliminate water waste long term
- G - chosen since the City is the biggest offender and money to fix system would actually save water
- E and G - this pairing is a terrible choice - education should be going on all of the time

Final Round

- E - water-fine should be based on water usage - get the problem fixed - be consistent and charge based on the amount of water wasted
- D - consider making it the 3rd violation
- F - it would be good to develop funding assistance to correct irrigation problems at senior citizen homes
- B - this one change would have a significant impact on preventing water waste

January 16, 2014 Meeting

Comments

First Round

AB Pairing

- B - receive more information from a staff person
- B - more effective message - show how to fix problem
- B - A does not fix the issue, anyone can take a quiz
- B - some people don't realize the issues, staff can help one-on-one
- A - most first fees are accidents – just take a quiz and learn
- B - provide short-term education
- A - B is time consuming and a hassle to arrange
- A - scheduling can be difficult for full time workers, making appointments is difficult
- A - do not like the video/quiz – access to computers and internet a concern
- B - scheduling an appointment conveys that the department is interested in working with citizens, not punishing them
- B - more effective in person
- A - Water Authority doesn't have enough staff
- Neither A or B - both options require staff. Could any of it be done over the phone?
- B - some folks don't have a computer
- B - too easy to cheat with the video option
- B - thinks an educational option would be more effective
- Reported someone many times for water waste and it looks as though nothing is done
- B - because it is more inconvenient for the waster - it promotes more accountability - everyone in the group agreed
- B - more personal
- B - water wasters are more likely to change if "They had to look someone in the eye"
- B -seniors in general -not as comfortable with computers and working on-line
- The city has done such a good job with education of the public and public relations on conservation
- Educating kids is important to raise value of conservation for the next generation
- Education is positive and is more effective than punitive measures
- Want more ideas about how to save water (e.g. recirculating hot water pumps with timers, refrigerator magnets about water times by season)

CD Pairing

- D - more effective to speak to people
- D - spells out consequences and fixes the problem
- D - stops the issue sooner
- C - more effective, can't waste water now
- D - corrects the issue, C evades the issue
- D - C makes no sense, ruining golf courses and parks hurts the economy, apply Smart Use audit to commercial and residential
- D - residents will respond more than commercial, parks, city, etc.

- C - would like to see it shut off sooner than the 5th violation -not supportive of water waste by the parks
- A Smart Use Audit does not seem stringent enough for the 5th violation.
- Is there enough staff to handle all the audits?
- How could we enforce shutting off the water?
- Shouldn't we focus more on businesses, apartment complexes and other large water users/wasters?
- C and D
- Why wait for the 5th violation to do these?
- Would like to see a breakdown of the water waste by type (park, golf course, etc.)
- D - smart use audit is already available to customers, so this should not be used after the 4th violation
- C - it shouldn't get to that point - should be addressed before 5th violation - everyone is penalized, not just the violator
- D - includes residential while C focuses only on City -should be addressed before that number of violations
- D - some public parks are shut off or not watered regularly - so it may not be effective to shut water off -an audit is preferable - it "will help them figure things out and allow them to correct"
- D - tax payers should not suffer the consequences of governmental agencies wasting water
- D - the Smart Use Audit would be helpful to both large and small water users

EF Pairing

- E - option F is similar to Option B
- E - larger wasters should have to pay more
- E - the more water is wasted the more people should have to pay
- F - more preventative to prevent waste – should be available for all seniors
- E - more cost effective
- E and F - both are good setups, can't compare
- E - larger water waste by businesses and the City should come with a higher fine
- E - seems more fair
- F - senior citizens may have money issues, and F fixes the problem
- F -help not only elderly but people with disabilities etc.
- E - shows no discrimination, it is fair because businesses that waste more water should pay more
- E -meter size based fees were very popular with the group, and they thought this program should have been implemented long ago - F was also popular - helping the elderly was a common theme with the group

GH Pairing

- H - parks should fix their own problems
- H - put the Water Authority back into the city to properly allocate water resources
- G - repairs the issue, some parks, etc. have budget issues and need help

- H - long-term, preventative, teach kids while they are young then becomes second nature
- H - not just a one-time fix - ongoing program and preventative
- H - solves problems from the beginning
- G - is preferable because 25% of fine can make a bigger impact and help fix problems
- H - education is important, it starts with kids - they need to learn about water conservation
    - G - should be a reward program, not a punitive program - use positive reinforcement
- G - group felt that we should not help the parks fix the pipes -don't want to reward them for abusing the system
- H -education-good option - a little goes a long way -can be preemptive, more bang for your buck – costs less with bigger payoff
- G - fines should go directly towards fixing the problem - water waste is an easy concept to comprehend, and more education shouldn't be needed -especially after multiple infractions and penalties

Second Round

- B - most effective and preventative - applies to more customers – 1st fee vs. 4th fee
- C - would like to shut off water sooner than the 5th violation
- Request for more data – How much water do the parks actually waste? – Is it just played up by the media?
- Encourage the city government to set a better example – fixing their pipes/not wasting water is a good model for residents
- E -businesses need to be fined more when they waste large amounts of water
- H -reaches more people possibly
- B - preferable because it fixes the problem before the 4th violation
- E - larger users keep repeating their offenses because they can afford to, they need a bigger "stick" with the meter size
- D - because they are the worst repeat offenders who show they don't care and need to be forced to pay attention -these are mostly businesses with money, not residents - they need to be audited so the problem can be fixed
- Instead of pairing one against another we should have ranked them similarly to how we did in the first exercise
- D - a more expanded look at a customer's water usage
- E - the group likes the fees being linked to meter size, but also wants the money going towards fixing the problem

Final Round

- H - effective, preventative program, should use more than 5% of funds
- With more money, Water Authority has the ability to have more staff to address problems as well as to provide education.
- E -the most important thing is to take care of water waste – higher fines should match volume

- Monitor commercial businesses for waste instead of residential housing.
- A water audit is important to instruct the property owner about how to fix the cause of waste.
- The Smart Use Audit seems more effective than the short visit as it's more in-depth.

Reactions

- Families use more water – age demographics are not well represented in the group – strongly encouraged families to be more educated about their water use.
- Suggestion – host a focus group of consumers to help come up with the questions/activities to ensure the core consumer issues are addressed
- It was tougher than it seemed.
- Residents and businesses should be handled separately.
- It's like comparing apples to oranges -hard to choose.
- Address violations sooner
- E - carries more power to enforce - more accountability for larger wasters - more fair
- Out of state companies just pay the fees and don't change their behavior.
- Homeowners often don't have the resources to pay fines, and should not pay the same as a business.
- Suggest a "Water Court" made up of citizens to deal with water offenses

March 26, 2014 Meeting

Comments

First Round

AB Pairing

- B - do not like the video/quiz – access to computers and internet a concern - group felt that watching a video/taking a quiz was too easy
- B - scheduling an appointment is more personal, engaging client face-to-face – provides more learning – better to change the behavior - interaction is key
- B - video and quiz are not as effective - appointment helps with education and problem solving -many elderly do not have computers - everyone in the group agreed
- A - B is expensive and time consuming to have one-on-one discussion
- A - scheduling and driving are more time consuming
- A - if available for computer-less households, e.g. at the library, etc.
- B - more effective for actually fixing the problem
- A - don't want to have to wait around, time is valuable
- A - convenience
- B - people aspect would be more helpful in changing habits
- B - unanimous vote because people are likely to have better learning/education outcomes if being taught in person - this option provides more accountability - it shouldn't be easy for people to avoid fees, and if learning is an alternative, it should be effective

- A -viewing the video and taking the test is better – perhaps give the violator a choice of A or B
- A - quiz is okay but not online
- A - don't have enough time for an appointment with staff
- A - quiz would be more convenient but concerns about having a computer
- A - no time to deal with staff
- B - some folks don't have a computer
- A - a video and quiz would be good, if online – don't like the idea of an appointment with staff – don't want strangers in house

CD Pairing

- D - concerns about C punishing the plants and grass if water is shut off –not a favorable option at the table
- D - Smart use audit – more appropriate to educate the consumer, less punitive, can help to uncover the problem, this option has more benefit
- D - it may depend on who is in charge of the public park, there may be miscommunication or manager is not told when there is a problem - an audit is more effective and it gives them an opportunity to find the problem and get a solution
- D - know what the problem is, fix the problem
- D - gets the water authority involved to fix issue
- D – real action – resolves problem
- D - specific to the resolution, C will just make brown parks – cost more in the long run, water belongs to everyone
- D - fixes a problem that needed maintenance
- D - though both need to be considered, D is more effective in fixing the actual issue
- D - education is helpful
- D - allows for more education and more individual accountability - shutting off the water would be "a hindrance to the community and wouldn't teach anyone anything"
- D - citizens shouldn't be penalized for city workers incompetence, i.e. turning off the meters at parks and medians - if after four violations, and the problem hasn't been solved, then professional help is need
- C - why wait for the fifth violation - shutting off the waiter will get their attention, impact a bottom line and force them to take action

EF Pairing

- E - favorite option - seems fair, equitable - doesn't invade privacy
- F - also favorable - elderly need additional support - can be forgetful
- F - elderly can benefit from the assistance
- F - hard to link meter size to actual water lost in leak
- F - good idea, elderly people need help and can't always help themselves
- F - many elder folks have old homes that need fixing
- F - would have appreciated the help in the past, have had a hassle with a leak in the past

- F - frustrating dealing with a leak as an elder
- E - egalitarian/fair-minded
- E - but why choose at all, they're not related, was the general sentiment from the group about this particular pairing - the group eventually chose E because they thought a bigger difference would be made if targeting corporations rather than the elderly
- E - both choices are important -the elderly do deserve help -however, the fines should already be determined by the amount of water getting wasted - a fairness issue
- E - participant lives in an elderly community and they don't know how to deal with irrigation problems -the elderly need help but it's even more important to link fee to meter size
- E - big business should pay more on a regular basis to affect their bottom line

GH Pairing

- G - group liked this option – fix the infrastructure – could create employment opportunities – maintain and invest in the community
- H - education – good option – less favorable than G – teach the kids and they will teach their parents, but ABCWUA should also provide adult education
- G - preferable because it is an immediate concern that can be fixed - enforcement is key
- H - education is important, it starts with kids - but the group felt that G has priority
- G - fixes larger issues
- H - education – saves water in the long run, parks and medians should know better and cut back
- H - better of the two – with percentage going to waste prevention
- G - would like both, but have to fix water waste
- H - after implementing H, focus on G
- G - a better investment
- G - improves the system
- H - because the Water Authority should not cover maintenance/waste reduction costs that ultimately the city should be paying for - the Water Authority should invest in education aimed at the city – also change G to 20% and H to 10% - the group didn't really understand why there would be such a difference in percentages between the two
- G - money should be used to assist the city government in irrigation problem – there is enough education now
- G - let's "fix" the parks -there's a lot of waste at the parks, get water-wise grass and more xeriscaping

Second Round

- B - is the preferable option – catch them early – education important at the start
  D - majority support this option, more powerful
- G - reaches more people possibly – more water is wasted here
- D - If enforcement after B did not work

- D - people need to understand the severity of the situation and fix the problem - makes clients take the issue seriously
- H - elderly cannot always fix their own issues, causes much water waste
- D - more beneficial to customer changing habits
- G - need service fixed
- B - it holds people accountable after 1 water waste incident - with option D, they have to have the audit, but only after the 4th violation - education needs to happen faster
- E - a bigger difference would be made targeting corporations rather than the elderly – also make sure the education the Water Authority currently provides (i.e. sprinkler audit) publicized - if more people took advantage of the current audit/education opportunities there would be fewer problems
- B - the audit could help most customers
- E - fairness was the big motivator

Final Round

- G - parks voted most important -really important to fix the root cause and invest in infrastructure
- E - we need money
- F - more effective and preventative
- G - most proactive
- E - all agreed that while education can fix individual accountability issues with water waste, bigger companies need to be held accountable with comparable fees to meter size -education is not enough incentive for bigger companies
- E - fairness was the main reason for the choice - this action should already be place

Reactions

- E - will enforce change, more payment will 'teach' and make sure problem gets addressed
- E - home visits by water authority staff were too expensive - using fines in any way, to increase the size of the staff was unpopular
- Small group felt strongly about shutting off the water to parks, golf courses and medians after the 5th violation - even proposed to change to 3rd violation

Appendix E
Meeting Evaluation Comments

- With regard to the reuse water program, would this be for extending the purple pipe system or just pumping it into the aquifer?
- I am concerned about the Kirtland AFB jet fuel water spill contaminating our aquifer.
- I would like more classes about water conservation, xeriscaping how to, make you own rainwater barrels and how to conduct your own water audit.
- More on where we get our water – aquifer, river, wells (non-aquifer)
- More on efforts to recharge aquifer
- I was very impressed by this evening. It wasn't like anything I expected. Great exercises. I think the Water Reuse section could have been stronger, listing pros and cons for each scenario. If we have the same quality water EPA/State Standards why should it matter? What is most cost efficient? Could you list web-site for each scenario to research after the meeting?
- This type of water class was great! I've been to about 3 classes- they have been so boring. This was fun and informational. Great job.
- Thank you very much for a great, entertaining and informative conversation. Excellent materials, handouts screen etc. Very interactive and well appreciated.
- No chance to suggest ways to save/reuse water and rebates to support them- like composting toilets etc. - really enjoyed the irrigation classes offered earlier by ABCWUA
- Include grey water and rain water discussion in future programs
- Should include stronger incentives for water conservation- i.e. rebates for conversion to SW landscapes (xeriscaping!)
- I appreciate the opportunity- thank you.
- The agenda was very organized; I liked that-very professional presenters well versed in subject. It was a great structure using facilitator at table and scribe – impressed with all - agenda, information, presenters, and use of time. Thank you.
- Be more prepared with estimates of costs to the consumer.
- Fantastic! Fun and informative. I felt involved and like that my voice was heard. Thank you.
- This was a good time well spent.
- Water reuse – a rational choice comes from a more knowledgeable background.
- I enjoyed that as a community I feel my opinion counted and definitely would come again.
- I would like to participate in more classes in the future. Thank you.
- The question should be about what we would prefer in the survey not what we are comfortable with.
- Everyone should pay the same rate per gallon of use.
- Need more water education of what uses or uses less water in the house
- Indian/indigenous friends of mine who could not come reminded me that water is not a commodity but sacred, the blood of Mother Earth
- More explanation of need for reclaimed water options
- The questions on the charts were like comparing apples to oranges

- The voting at the end re: water reuse scenarios did not offer enough info about the scenarios in order to make the voting worthwhile
- More about how reclaimed water is being used
- On the water waste voting, some of the voting (the way it was set up) was not fair
- The mediators were great in making sure everyone's opinion was heard – I liked the small table approach – very effective
- It goes back to consciousness – conservation as a positive lifestyle choice and spreading the word
- Somehow let's begin a retrofit of all homes – let's get a second pipe system to recycle kitchen sink and bathtub and sink and reuse it onsite
- More connection/coordination between City Parks and the Water Utility
- I felt this was very informative and would love to attend another
- I think the bead voting system was skewed because less people voted for the Bosque than other things but each vote was worth more marbles – more explanation about the options and what the bead meant would have been helpful
- I learned a lot – thanks
- Could we have a small glossary of terms – irrigation? - turf? - Smart Use? – remember we are lay people
- Effort in preparation was very successful – glad I attended
- Would like to discuss KAFB jet fuel contamination into aquifer versus aquifer recharge
- Water reuse is only one issue – what about the endless sprawl to the west – the supply is not endless
- Appreciate allowing consumer input
- This was great! Thanks!
- Good facilitators and presenters
- I thought Gail and Dave facilitated the table extremely well.
- Thanks! I felt it was productive!
- Excellent class and very informative!
- The room was very noisy, making it hard to hear – the facilitator at our table was very good.
- I realize that you had to "force" choice but on the 2nd game, I often wanted to pick both – apples to oranges don't compare and choices difficult
- Great agenda - very informative – Heidi was a very pleasant person
- Good format, not boring, small group discussion with facilitator great – game type feedback enjoyable – kept differing opinions and expressions light hearted – I would enjoy doing it again
- Please provide complete information of what kind of chemicals and what amount of chemical are used to treat our drinking water.
- More detailed breakdown of the water waste pie chart – residential, government, business
- I believe our natural environment, the Bosque, is very important to the city and state, it has to be a priority. What about people in the valley particularly along the Rio Grande who are fined then drill their own wells and continue watering as they please. Why do we think reclaimed water is better to have been stored? What's in the aquifer (jet fuel

perhaps) or in the air that settles in lakes and reservoirs? Just not clear to me what the advantages are – very interesting- thanks for the organization.

- There were too many choices to be made without all of the factors or variables being given to us - the chart on waste water type didn't say who contributed to each type of waste.
- Great concern about the base oil leak and the aquifer – do not believe today's Journal report that we have 30 years to solve the problem – think West Virginia
- I had a question about the Kirtland oil/kerosene spill and was told it would be addressed, it wasn't. I don't trust the feds. to be honest about the safety of treated water. We should be careful about treatment systems
- Very valuable technical info – thank you
- Very interesting
- Exercise 2 – reorder the choices in opposition – Exercise 3 – complex scenarios with no time to discuss pro and cons and wish list for reclaiming potable water
- This format is very valuable to get citizen input and could be used on a wide range of topics of city development.
- Please pass on my congratulations for a superb job last night w/ a complex topic, large audience. Was #1 meeting requirement met? YES, ended on time; #2, start on time? YES; and #3 accomplish something, YES indeed. Creative approach to gathering input, well organized w/ excellent handouts, and very well facilitated. Look forward to the next one, and I rarely say that about organizational meetings.
- Out of all workshops and lectures I have attended in the past, this was the most educational and fun of them all. Facilitators listened and gave thorough answers with information that made sense and we can pass on. Count me in on future meetings.
- I really enjoyed the setup, different exercises and discussion time. I learned a lot more than I knew before -interested in participating again.
- We had a great leader Gail. Thanks for starting on time and ending on time. Thanks for the refreshments.
- It was great! Do it again!
- Great facilitator. I really liked the visual aids used -wonderful handouts.
- Very informative, interesting
- Customers should pay for their water. Higher costs are the best way to ration.
- Residential lawns should be out-lawed. You want grass, go to a park or back east. I love the fact that you ended on time. It was fun and educational.
- An excellent evening - thank you so much
- It was fun.
- This is a very beneficial conversation. I am interested in finding out some of the results of the conversations. This is a good program to supply to various communities.
- No mention of gray water regulations and usage
- Less information for us and majority of information for agency use
- Very good information -great time spent -all people who work for ABCWA were great
- I would like to participate in future sessions.
- This was a most educational program. Gail was a good leader.
- Our table was definitely number 1. Our facilitator Liz was excellent.

- I did not care for the random seating, came to event with elderly mother – needed my assistance (they moved me thanks)
- I propose considering a rule restricting, within reason, installation of lawns and planting trees in new construction areas. Let's not penalize the people that were encouraged 30 – 50 years ago to do unlimited landscaping. We were told when we bought our house, 52 years ago, that I still live in, that the city had an unlimited water supply. We need a water rate that takes into account these factors. Let's grandfather water rates for older lands and trees rather than encourage tearing out lawns and letting the trees die. Dead lawns are common. The NE Heights is full of ugly, dead trees that have been neglected and owners don't or can't afford to have them removed. Has the water department and or city taken into consideration the air quality factor for our city? Green trees and grass process carbon dioxide needed for a healthy environment. Xeriscape can be very attractive but I doubt we want a city devoid of green. I have 5 deciduous trees in back and 6 evergreen trees in front. I have some grass front and back and my water bill is almost always higher than average although a single household has minimal dishwasher and laundry usage. The class is very helpful to customers about how to save water.
- I want to express what a fun enjoyable event this was. Engagement of attendees was excellent. The time whizzed by, and the hosts were friendly and helpful.
- We would like to thank you for inviting us to participate in the CUSTOMER CONVERSATIONS meeting. Allowing us citizens of ABQ to express our thoughts about future drinking water options was much appreciated. The meeting was very well conducted. It was started on time and stopped on time. Everyone got to participate. The moderator repeated the questions before she answered them. Our questions were answered. We all got to see the results of our opinions right away. Our table moderator, Megan, was very good about drawing out the reasons for our opinions. She wrote them all down. All in all, it was probably the best conducted public meeting we have observed.