

Maricopa County Comments March 23, 2010

	Increase Reclaimed Water use across the state.
	Amazed at how little water knowledge children and adults have, for instance don't understand basics of water cycle. Important to get Project WET into every classroom in the state. Project WET (Water Education for Teachers) educates teachers and students about water and publishes curriculum guides.
	Have found in surveys that people really don't know where their water is coming from. Especially here in the Valley don't know water comes from snow pack in the mountains
	Came from Chicago 20 some years ago, don't do anything about water conservation here, but did in Chicago. Knowledge about where we are at, i.e. we're not in Chicago. Water rationing takes place in Chicago, but not here.
	Just had winter visitors and they are always shocked that we have no restrictions on water. We need nothing less than training for desert living. Project WET has many things, but some simple things that could be repeated again and again, for instance, the top five things about water in Arizona. Would be important to come up with a top five things that would be important as fact sheets that people should know – simple messages.
	In addition to addressing what people don't know, there are also myths about water, for instance, "we could use the water in Tempe Town Lake or about desalination." Common misconceptions.
	Arizona Republic is one of the few places to get messages out, but not that many people read the newspaper. Would be nice to get messages out maybe on TV or radio. Vehicles or tools to get the message out. Shaun McKinnon had a great article on the drought, but not everybody gets the paper or reads it.
	One of the biggest things out there is the water softeners. Sodium is the worst thing to use for your body or the golf course. You keep dumping sodium in the golf course, you need to keep putting on more water. How are we going to educate people about what is good for the environment. Cost is not only issue. Not rocket science. There have been studies about sodium impacts. Sodium really doesn't do anything good for your body or blood pressure. Blood pressure is impacted by sodium. Could replace sodium with potassium chloride.
	To pick one concern, I would say riparian ecosystems. In stream flow, water rights and how they contribute to the health of riparian ecosystems. HOA
	uses data from AZMET to manage systems. Hydrological society meeting – hard to access information. Hard to find how to apply water conservation techniques.
	Work with growers and know that agriculture uses majority of water, but use it for a good purpose. One concern is if there is enough water to go around for everyone. Could use water from growers for water, but that might be a mistake. Need to make sure there is enough water for farms and people. There is a perception that growers use water when they don't need to, for instance like today when it is raining, but they don't know that that amount is not enough. People don't recognize that ag is conserving. Another issue is the quality of water. Food quality issues, likely leafy greens, in the Yuma area. Need to make sure that the water used for irrigating food crops is important. Need to do a better job of working and researching water quality. May or may not be able to track sources of pollution. Open ditches . . .
	Water quality for farm issues is similar to concern about sodium.
	Water quality and quantity concerns indicate need for supporting agencies that have this

	role. Need to educate policy makers and public. (legislators/law makers instead of policy makers)
	Picking up on water quality and sodium concerns. Need public to understand cost prohibitiveness of desalinization. Energy costs are not understood. Used to be able to visit water treatment plants before 911, but would be good if people could visit to understand the process.
	Need to educate water policy makers – law makers, legislators.
	Most people don't understand the water/energy nexus, e.g. that it takes water to make energy and energy to distribute and clean water.
	Saving water or using water? Need water to make electricity. Drafting out of the ground and pumping it has an energy cost. The generation of energy uses water.
	Sodium . . . People want to do the right thing, but historically they don't understand that if you put things in the water, it doesn't just go away. What does it mean and how do you dispose of things properly. Unclear, for instance, how to "dispose properly" of pharmaceuticals. People need specifics so they can act.
	Following up on pharmaceuticals, it is not just the proper disposal, but understanding that putting pharmaceuticals in our bodies contributes to pharmaceuticals in the water.
	Is reclaimed water safe? I see purple pipes and wonder if it is safe? Have no idea if it is safe. Safe for people, dogs?
	Waste water treatment plants have standards and different standards for different uses of water. ADEQ has standards. The public doesn't understand the permitting process and regulations.
	It is scary, but most people don't want to know. People are somewhat lazy, just want to be told that the water is safe.
	Not enough hours in the day to educate ourselves about all water issues.
	Reclaimed water for golf, fecal matter is most concerning, but sodium is just let go. Scottsdale and golf course group threatened to sue each other. Gave better quality of water for growth of rye grass. Will cost more for the water quality needed for golf courses to grow grass.
	What of the things that ensures our future water is recharge. Some recharge is treated effluent. We don't know a lot about the emerging contaminants and don't know a lot about the long-term impact or how that will turn. Reuse in general.
	Long-term contamination of the soil is another issue.
	Water conservation education is important, but can be simple: overwatering, watering the sidewalk or street.
	Why not have an alarm on misuse of sprinklers
	Golf courses do water audits and are thinking of every way to conserve water because water costs money. But they still overwater.
	Category of personal . . . Connecting children with nature, my own daughter when we had desert landscaping, she wasn't outside, but now we have grass and she is outside all the time. Quality of life issues and trade-offs.
	Scaring or making people think they'll save water . . . When my dog chewed up my sprinkler and my lawn filled with lawn, my water bill only went up \$20. Water is cheap and there is no financial incentive. Should we have a tiered system?

	Another concern is the agency that is responsible for our water policy is facing a 60% cut after already having had a funding cut.
	Disrepair of flood irrigation system leading to water waste. Residents don't know how or can afford to fix the flood gates or other parts of the infrastructure. Income an issue. Infrastructure declines a problem.
	Top things you should know about Arizona water: should include that climate models show that Arizona will have reduced water in the future
Hand-written surveys	
	Residents should be xeriscaping. Need workshops on xeriscaping.
	Reduce the number of golf courses
	People (my neighbors) who always take too much irrigation water and allow copious amounts of water to run down the street to the corner rain gutters. Unfortunately, there are no 'irrigation police' to make them stop this practice.
	We need more advertizing and incentives (i.e. rebates, coupons, inexpensive products, etc.) to buy retrofit kits to convert toilets to high and low water flushes (for solids and liquids)
	More incentives and info on how to collect and store rainwater from roofs, etc. It's not hard and should not be too expensive.
	Finding trained and qualified staff to work in water treatment and waste water plants, who not only have years of experience, but also hold DEQ certifications needed (i.e. Grade III)
	Find training opportunities to keep them (water treatment and waste water employees??) current in their field and provide them with professional development hours. (pDHS)
	The use of sodium in water softeners is very harmful to growing turfgrass. Solution: stop/reduce using sodium and replace it with potassium chloride. However, it's more expensive.
	Unfortunately, water use will remain high until the cost goes up.
	Golf courses need the ability to have more water, especially those with high levels of sodium in their water/soil.
	Non-native plant encroachment into aquatic, riparian, and agriculture habitats in and near the Phoenix metroplex.
	Economic, environmental and human health problems caused when introduced plant species become predominant vegetation in central Arizona water resources.
	The continuing threat of new aggressively colonizing vegetation harming central Arizona's surface water resources.

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	What worries me is will there be enough water for my grandchildren?
	If you notice what is in the Salt River, we need more storage for the water.
	UA, ASU, NAU – loss of Arizona Water Institute, knowledge, interaction, it will take time to get this back. We need it to apply to the entire state and we hope the recommendations will be valuable to the citizens of the state. Arizona Water Institute – collaboration between the 3 state universities, has been disbanded, trying to address the link between water and power. Power needs to be generated, water-energy nexus.
	Rebates through the city for converting high water usage landscapes.
	I like camping and I like to see riparian areas, would like to preserve riparian areas but want to preserve as much water as we can, maybe related to water storage, maintaining water allotments in Arizona.
	What really annoys me – delicate balance between conserving water, with things in the desert, such as golf courses, we want to make it an enjoyable place to live, balance between proper resource management and quality of life.
	A lot of water, a lack of attention to gray water usage in the cities, being able to use the water more than once before it goes away, this could potentially work for all these situations, gray water
	We have one of the greatest policies for user-friendly set-up for gray water use, not doing enough to educate the public on proper ways to use gray water.
	I think the utilities do a great job of informing the public through notices sent with bills, SRP doesn't do as good a job in setting standards i.e. use electricity in peak hours vs. water used at noon, no incentive for using water in off-peak hours, you pay per gallon period. We need more storage places before we sell it to California. We need to educate people on irrigating at certain times of day, morning, including native and non-native Arizonans. Using water bill as a mechanism for educating people.
	Same worry, but more general – need educated legislators, public, public officials such as mayors and councils, stakeholders, water is such a critical issue, we need people to know more about water, more complicated in the Southwest.
	I'm annoyed by – city teaches responsible irrigation practices but they don't follow their own practices, teaching residents, Water Wise Community – certification, similar to LEED, incentive for the parks and communities to work together. The city doesn't collect information on their own practices.
	Because the federal officials (BOR) are saying there are more complications in the southwest, what are they? The public does not understand what they are and where they can learn more.
	Often hear stories about the stormwater and how bad is it, stormwater is bad quality, full of trash, but what is in it? First thing is lack of information on stormwater and actions to clean it up and retain, capture, reuse?
	What I like – Tucson Water is doing innovative programs of retaining the stormwater and putting it into the ground. "Green Streets, Green Neighborhoods".
	Thought is you see the retention basins for the stormwater and how safe is the grass the children are playing on?
	I'm wondering how the budget cuts affect us directly and indirectly water and how that will affects us short-term and long-term?
	Don't want to go back, closing of offices, going a step backward (in regard to budget cuts),

	not a wise thing to do, more costly in the end i.e. once groundwater is polluted, educate legislators so they can see the need and make wise decisions. Better to be proactive then try to fix it later.
	I'm scared at what's happening to ADWR, layoffs, people who do effluent permitting are no longer there, water is so critical to this state, these people are gone so it may not be possible to be proactive at this point, how do we keep the disaster from happening? Closed offices and people are gone.
	Big concern with quality of water and wastewater, emerging contaminants, new chemicals getting into water supply, quality of water being recharged into the ground, how this affects the existing groundwater, treatment and groundwater recharge with wastewater recharge. Concerns about violations and potential additional treatment required.
	1/3 of water used to flush toilets, spend all this money and time to treat water, we need to look at our own personal behavior and how we can change, there are options out there, better way to take care of your own personal waste.
	Reuse and recycle water – there are projects in Europe, whole communities are reusing the water to irrigate, wash cars. Live in apartments where water is included as part of rent. Need demonstration projects and due to water bill structure, doesn't encourage water conservation. (Transition Town Movement).
	It isn't easy to figure out how much water one is using, can tell with electrical consumption but not water usage. How come we can't have that?
	Question – show of hands who doesn't work for government, schools, (7/25)
	Several comments on reuse, make building code changes to allow people to reuse their graywater, give people the access to reuse the water directly, when graywater comes out, homeowner could make a connection before it goes into the sewer for their own personal use.
	I worry about the disconnect between growth policies and water policies, worry about impact of Phoenix area thirst for water that may deplete other areas, due to water rights
	With the growth and water policies, the 100 years assured supply water rule, sounds good but might be encouraging growth in open desert areas, development of ag lands with existing water rights but may not be a sustainable policy.
	If ADWR people have been laid off, there will be no one to supervise or inspect, no policing of obtaining water that you have no right to take.
	what do we do after 100 years?
	Informal poll – worried that highly motivated people's concerns that may be biased and not representative of the general population.
	We're all the public, it's not an us vs. them
	Oceans are mostly water, technology exists to use the ocean water, not used now due to expense.
	Arizona is working with several agencies, it is happening now because they need to assure the 100 year , power needs for desalination, how much should water cost? The same thing that happened to the gas, same thing with water, find creative ways to balance, it takes time to move to that direction, also to implement these decisions.
	Research question – what is the relationship between the heat island effect and water use?

	Education, conservation, involved with this for 35 years, not a lot of progress, have to start when children are young, this is what we need to focus on, teachers need to be familiar with the water issues.
	First question we ask our children is do you know where your water comes from, if they start with elementary school, passing problem on to them, many college students don't know the answers to this.
	Not only is there a lack in schools, but also voters. People don't know but there is also a lack of people going into these water occupations. I have 90 people who work for me and I can count on one hand how many are under 40. Very common, state and federal level; decline in young people going into Natural Resource fields, hydrologists, etc
	Her major is urban development, water has a critical role in shaping Phoenix urban pattern. Water and land working together for the urban pattern, how to avoid urban sprawl, water provisioning, role of water provisioning and shaping urban patterns.
	Water role in crops – more water being diverted from Ag to domestic use; will be importing much of our crops, need to balance between ag use vs. drinking water use, national security
	Drought buffer – can pay you not to plant, but not to drink, flexibility goes away.
	I'd like to see easier access to a spot for water policies, need a database for building codes, street designs, etc... Needed for those looking to shape policies.
	Tied in with NEMO – don't know how it ties in with municipal officials and education.
	As we go through this (water crisis), aware of efforts being done in other states in the southwest? Was that effort able to shape policies?
	Decision Center for Desert City – any involvement with this process?
	List from ADOT – we have so much more space to build roads, etc... but what about the water? Lot of things taken for granted, we can go to desalination, concerns with waste management of desal, only good for 50 years, would love to see some education programs for the legislators.
	Who are the lobbyists now – it's their job to educate the legislators.
	Process to relook at our rules and regulations, things change over time, need a process to look at these rules and see if things need to be changed, does this still make any sense? Adaptive management process, go back and look, does it still make sense?
	No process in AZ for watershed decision making, rural groups are struggling with these issues, enormous amount of time and effort from the public and stakeholders, Oregon has watershed councils, AZ has no formal process for watershed group coordination.
	Crisis in CA – diversion of water for endangered species
	Those decisions are being made in courts, not by the public, done through lawsuits, someone must win and someone must lose. (Judge has ongoing decision power.)
	Different ideas by different groups, need a central location for getting information on graywater,
	There are a lot of people out there doing things i.e. rainwater harvesting, getting involved locally, jobs can be made out of small solutions, many people can benefit from small solutions
	Those of us who are agency people, we work together (state, federal), work together well
	City of Chandler throws an annual water festival for 4 th graders.
	City of Chandler has excellent public education on gardening and low-water usage for landscaping.

	Happy that there is a tax credit for water conservation, only through next year, maybe can be extended?
	For almost every question, there is a lot of research being done on each of these issues.
	Maricopa Extension Office Master Gardener Program has excellent resources.
	AZ Project WET good example of water education.
Hand-written surveys	
	Lack of adequate water storage in years where we have an excess of rain and snow. We need more storage for water.
	Better use of grey water by all homeowners.
	Where does Arizona, particularly central Arizona, go for water at the end of the 100 year assumed water supply?
	Citizens need to be educated about water issues so they understand that we live in a desert and that water conservation is vitally important.
	Arizona needs more storage capacity to save water during times of high run-off
	Storm water – what’s in it now and is anything being done to make it cleaner in the future?
	Sustained growth – is anyone forecasting population growth versus resources (water) and making government aware?
	Educating people on where Maricopa county’s water actually comes from so that people might make more educated decisions on how they use their water, as well as vote on water-related issues (if the opportunity arises)
	Education about reclaimed water
	Make getting or being involved in water issues in Maricopa county easier and more engaging (Cooperative Extension already doing a lot of this).
	I worry... drought on Colorado River – impacts on central Arizona. For instance, all the gains made in replenishing ground water or using in lieu of groundwater could be diminished.
	Allow others outside Arizona and Maricopa county to realize why so many water intensive activities (ag, golf courses, lawns) do go on here in the desert, to do away with the perception that “people shouldn’t be living in the desert.”
	Preserving riparian water flows and riparian habitat
	Collecting water in our reservoirs and keeping as much as possible of our water allotment.
	Encouraging ground water recharge (i.e. places like Gilbert Riparian Recharge or Chandler Groundwater Recharge).
	Avoiding pollution of our water supplies.
	Grey water need to recognize its importance in decreasing water needs, reuse is so important. Building codes need to require new construction to accommodate plumbing for grey water. Australia is a great model and Tucson is starting to change its policy. AZ/Phoenix has great codes in place – now need to motivate businesses to follow through.
	Rain water catchment. Capturing water onsite for irrigation use is easy step – using rainwater to wash clothes, then use that water to flush toilets, etc. Could create new job field. Needs innovations for better catchment system.
	Water restoration – restoring wetlands and riparian areas could actually retain more groundwater. Jane Goodall has many programs in Africa where restoring wetlands and revegetating buffer zones near water sources have increased water supply. We need to restore the natural earth, and it will return the favor – it is really that easy.

	Cities often teach best irrigation/landscape practices to their residents, yet their Park & Rec Departments do not follow these same guidelines. What if there was a WaterWise Community certification like an Energy Star Building or LEED certified build? All city departments would then have an incentive to cooperate and adopt standards.
	What is the real cost of residential water? I've heard it costs more money to pipe water (potable) to my home than I am charged. If I were charged the real cost of the water, how much more would I pay? What percentage of my income?
	My friend told me about a documentary about water privatization in France. He said in France it is illegal to collect rainwater at your home. Could something like that happen here?
	Rebates, tax rebates for removing Bermuda grass – native, drought to (tolerant??)
	Info on grey water systems for home/office
	Education or sample rain water harvesting. Planting trees on ????
	Rainwater
	Grey water – more accessibility, education and even tax cuts?
	Budget cuts – how will it have immediate effects and long term effects?
Online Surveys	
	storm water - How dirty is it? Is anything being done to make it cleaner? Is anything being done to capture it?
	Government Planning - When communities plan for growth do they seriously take resources, like water, into account?
	Communications within the water community. There is a lot of information but it also takes a lot of searching to put it together.
	Retain state information systems, e.g., AZMET to provide necessary and timely information to water users.
	Need more participation in scientific/engineering forums by ADWR, APS, SRP in American Hydrology Society type meetings to let professionals know where policy and practice are being directed.
	Need new model to fund scientific research and development of efficient water use techniques and systems. Need to address needs of water users. SRP is but they help.
	There appeared to be many regulars at the listening session on 3/23. More water users should be included. This was my first meeting of this type and group and was not sure who to avoid offending.
	Pollution
	Conservation
	Safety
	I moved here from Illinois 1 yr ago - mystified by the average Arizonan's lack of concern about water.
	I feel bad about buying and using water softener and but was also concerned about life of appliances. It's like diapers; either disposable or washing cloth uses resources!
	Slowness to adopt low water use landscaping - #1 above. Water prices should have tiers to go up as use goes up. People need financial incentive to change behavior.
	Sprawl - like the concept of "smart" growth.

	<p>I have been designing communities in the Phoenix Metro area for 16 years. In order to solve the issues of urban flooding, agencies enacted policies that require stormwater retention for the 100 year storm event on the site of development. This has had a great positive impact in managing urban stormwater and reducing urban flooding. However, as land has been developed and the runoff from the areas that used to contribute to our natural washes has now been retained onsite and no longer reaches the washes, the native plants and species in these washes are suffering. In many areas where the vegetation in the washes used to receive runoff from the smaller storm events, they now only receive runoff from the larger storm events. The vegetation whose root systems used to provide erosion protection and prevent the transport of silt and sediment, are no longer present in a way to provide that natural beneficial function. As a result many of the washes are experiencing greater erosion and migration due to this condition. The lack of intermittent moisture in these washes and the reduction in vegetation has also caused a decrease in the animal species that inhabit these areas.</p>
	<p>Although it would be difficult, I believe there are alternatives that would still address the urban flooding issues and also allow our washes to maintain the natural and beneficial functions. I feel that it would be a worthy effort for the Extension to expand some of the existing initiatives related to watershed management and water quality, and involve local government in a discussion of this topic, and even evaluate alternatives that would provide all of the natural beneficial functions as well as address the issues related to urban flooding, water quality and groundwater recharge. I would be happy to be involved in whatever way you see fit if you decide to pursue this action. I think it would be a very worthwhile effort to our community on a variety of levels, and would enjoy the opportunity to discuss this further with you to explore the opportunity and possible approaches for this endeavor.</p>