



Minutes City of Tempe Water Sustainability Commission Subcommittee July 12, 2017

Minutes of the Tempe Water Subcommittee meeting held on Wednesday, July 12, 2017, 4:00 p.m., at the Public Works Conference Room, 31 E. 5th Street, Garden Level, Tempe, Arizona.

(MEMBERS) Present:

Alix Monty (Chair)
Gretchen Reinhardt
Kendon Jung

(MEMBERS) Absent:

None

City Staff Present:

Marilyn DeRosa, Deputy PW Director Engineering
Braden Kay, Sustainability Manager

Guests Present:

Jorge Kalil, Office of Sustainability Intern

Chair Monty called the meeting to order at 4:02

Agenda Item 1 – Public Appearance

There were no residents or members of the public present

Agenda Item 2 – Approval of Meeting Minutes

Sustainability Commissioner Monti introduced the minutes of the May 9 and June 13 meetings and asked for a motion.

A motion was made to approve the minutes.

Motion: Commissioner Jung

Second: Commissioner Reinhardt

Decision: Approved

Agenda Item 3 – Goals of Subcommittee

Chair Monty suggested recap the June 13th Water Subcommittee meeting.

- The purpose of subcommittee is to:
 - Advance cities conservation goals
 - Review and support education and outreach efforts

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- Support upcoming policy development
 - Be involved in existing policy
 - Chair Monty will take some time before next meeting to work on rewording of goals.
 - Urban forest and water:
 - Plants for shade/transportation are different than those chosen for water purposes
 - Water is piece of plant conversation
 - Community gardens
 - Conservation may not be the correct word to use because it suggests a reduction in water usage. We don't want to set goal for water use that doesn't allow for goals of urban heat island reduction, canopy cover, local foods, etc. to be achieved.
 - Accessibility instead of conservation?
 - Smart use of water?
 - ASU changing language to reflect optimal water:
 - Addressing right place right use for waste products
 - Improving yield for waste in terms of economic activity
 - Theory of optimization
 - This was their attempt to address multifaceted nature of this issue
 - Circular economy in water
 - Idea of optimization allows you to take step back and define our values. How do we define best uses? And try to quantify/optimize uses for those categories
 - City that saves most is probably city that is least prepared to shocks in climate
 - Just focusing on conservation makes you vulnerable in other dimensions that make this livable and successful city
 - Conservation is important, don't want to overuse, but focus on optimization instead?
 - Have staff dialogue about the issue
 - Take value conversation and discuss how water can play role in here
 - City should go through process of deciding guiding principles, coming up with new goals, and understanding actions and pilot projects that must be undertaken to support goals
 - Council would appreciate guiding principles that help guide to concrete recommendations. Use principles as discuss goals and problematic outcomes and go to council with goals.
 - Examples?
 - Important that goals and programs address affordability of water or availability to underprivileged/underserved
 - Goals address potential impacts from climate and urban heat island
 - Continue support dedication to water safety
 - Sometimes delivery and safety get left out of sustainability conversation.
 - Responsible use of govt. resources
 - Three biggest cost expenditures are:
 - Water delivery infrastructure
 - Park enhancements
 - Transit and transportation infrastructure
 - Do expenditures reflect our values?
 - Principles should be consistent with values.
 - Ex: we value water access to everybody. Always affordable, even at low end.
 - Values behind guiding principles (chose 6 values, and build principles around that)
 - Looking out for future generations
 - Resilience principle

- Mindfulness- right quantity and quality for right use. Systems approach
 - Maximizing potential for water reuse
- Look at other cities and their goals
 - Honolulu
 - LA-goal of having x% of water be surface water that falls within metropolitan borders.
 - Have sample goals and keep list of what programmatic outcomes (helping set goals for conservation programs, reuse investments) and actual investments would be concrete examples above.
- Value: leadership
- Value impact of actions on environment. It's about stewardship. Water is not just for human consumption. Water is an ecosystem service (plays role in geology, fauna, flora, biodiversity) Ex: health and habitats of Colorado river.
- Need to define relationship to water.
 - What is responsible water use for Tempe?
- Need to speak to some of the neighborhoods that might not share same values as us.
 - Green landscape and pool
 - One of values should say: value community of Tempe and all inhabitants.
 - Respect all different ideas
- Value: believe in transition towards water optimization
- There is not very heavy water use in parks
 - Use more water in parks to not encourage lawn water usage.
 - Value: valuing community areas.
- Braden: one great goal would be to take framework and present it at retreat in September
 - We meet 2 to 3 more times before so we can present and workshop as part of retreat

Agenda Item 4 – Water Conservation Goals

- Have conversation with water group before retreat
- Take all residential use (multi and single family) divide, put in gallons, by number of people, and days of the year
- Council sets goals of GPCD of 110 by 2020. Conversation about goals related to optimization of water use (not conservation) and to have goals really based on, and integrated with, other sustainability goals (systems approach)
 - Customer
 - Single family res.
 - Multifamily res.
 - Landscape class
 - Commercial class (any business. Don't meter waste water flows)
 - Industrial class (heavier use of water. Meter waste water flows also)
 - Construction class (ex: trucks watering)
- Meters (smart meter initiative)
 - Implementing throughout entire system over next 3 years
 - Went straight to AMI (advance metering infrastructure) network. The 43,000 water meters that all have transmitter that sends signals to antennas placed strategically collecting data and sending to database. Reads every minute. Able to get real time data with respect to use.
 - Buying software WaterSmart. Plug in that enhances user interface so that customer can get all kinds of info about your use. Look at real time meter reads. Compare times of year. Data analysis. Links to youtube how to videos. Try to get it customized to add some solid waste stuff in there. Eventually have everything on software.

- Over next 5 years way that residents, and specialists, think about and approach water conservation.
- Stadium (pilot for smart campus) metering. Applying to myriad of different things might be worth connecting with them.

Agenda Item 5 – Utility Rate Study

- Braden and Marilyn updated the subcommittee on the utility rate meetings.
- Every couple of year (this year being one of them) we reset and reanalyze revenues and expenses to see how rate structure is working.
- Marilyn did focus groups, talked to customers separately, looking at modifying structure a little bit towards water budget based rates, which started in California and are getting more traction.
- Water budget based rate
- Current tier system
 - Water budget based rate will have tiers
 - Calculate indoor, outdoor, wasteful use (we call it discretionary use). Tiers based on real data at your house
 - As we justify tiers for system in 2018. Justify using budget approach as framework.
 - Indoor use for small family
 - Indoor for large family
 - Average outdoor use for 9000 sqft lot
 - Average outdoor use for 20,000 sqft lot
 - Discretionary
 - Summarize citizens' concerns

Agenda Item 6 – Water Harvesting Pilot Projects and Fire Station #7

- Braden and Marilyn updated subcommittee on the Fire Station #7 project
- Council chose sustainability option C
 - \$200,000 worth of energy investments
- Council wants water harvesting/cistern to be part of this project and it will serve as the pilot water conservation project.
- Got approval for low-impact development on sight
- Commissioner Jung asked if there is any capacity to leverage local artists in beautifying cistern
 - Interesting to explore
 - Great potential concept: existing wall at Estrada park, part of it is getting take down. Idea is to improve walkability of walking track through public installation and to have elements that make track cool.
 - Some potential for funding for ratifying cistern.
 - Water cistern Seattle fire department is a great example.
 - Can we approach money for art installation in that area to highlight system in way that doesn't change system?
 - Can art commission solicit submissions that highlight water in desert? Visual representation that emulates optimal use of water.
 - Potential to make sure that signage is communicated in creative way
 - Example: cool piece where as you walk you find different elements (feather, paw print) last sculpture is bird made of all different pieces and its about this one bird that is endangered in that area. Only realize until the end, but whole track is teaching you about bird.

Agenda Item 7 – Presentation Requests

- Chair Monty: In creating these values, principles, goals, the water subcommittee will check the possibility of having staff from water conservation to give an overview of the city water resource program
 - Look at ecosystem or watershed scale or stakeholders' assessment of all different uses of water. Who's in which groups and where they stand currently for water use.
 - Tempe water 101
- Curious about water works partnership with ASU
 - Currently doing feasibility study. Conversation would have to be at conceptual level because they just started.
 - 6-month study.
 - 5 min presentation: Marilyn to come back and give presentation on basic questions being asked about feasibility study and presentation in 6 months once study is complete

Agenda Item 8 – Future Agenda Items

Meet again Monday, August 7th 5-6:30 (try to keep to 90 minutes)

Prepared by: Jorge Kalil
Reviewed by: Braden Kay