



## Minutes City of Tempe Sustainability Commission August 7, 2017

Minutes of the Tempe Water Subcommittee meeting held on Monday, August 7, 2017, 5 p.m., at the Eisendrath House, 1400 N College Ave, Tempe, Arizona.

**(MEMBERS) Present:**

Alix Monty (Chair)  
Kendon Jung  
Gretchen Reinhardt

**(MEMBERS) Absent:**

**City Staff Present:**

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

**Guests Present:**

Bob Hurs, resident  
Jorge Kalil, Office of Sustainability Intern

Chair Monty called the meeting to order at 5:05 PM

**Agenda Item 1 – Public Appearance**

Bob Hurs is a resident interested in sitting in.

**Agenda Item 2 – Approval of Meeting Minutes**

Chair Monty introduced the minutes of the July 12, 2017 meeting and asked for a motion.

A motion was made to approve the minutes.

**Motion:** Commissioner Jung

**Second:** Chair Monty

**Decision:** Approved

**Agenda Item 3 – Goals of Subcommittee**

Wait to discuss upon Reinhardt's arrival.

Chair Monty handed out guiding principles.

Monty focused on getting down brainstorm from last meeting. If it looks sparse it is because she didn't want to speak for others.

- Programmatic outcomes
  - Deliverables
  - What we hope to see in future
  - How specific?
    - Target oriented since guiding principles and goals are broader
- Values > Guiding principle > Goals > Programmatic outcomes (most specific)
  - How are programmatic outcomes different from goals?
- Get 4 or 5 guiding principles and then attack things you want to achieve and have those be the goals
  - Ex: from water rate study
    - Everybody has responsibility to conserve (equal treatment)
    - All costs will be portioned fair and equitably (based on science)
    - Everybody is living with limited resources
    - Transparency: everything in rate study had to be able to be explained and accessible to anyone

#### **Agenda Item 4 – Water Resources Presentation**

Presentation by Gretchen Baumgardner

- Arizona has bifurcated water law
- Surface water
  - "First in time, first in right"
- Ground water
  - 1980 Arizona Groundwater Management Act
    - Mitigate overdraft
  - Phoenix AMA goal
    - Safe yield by 2025
      - For every gallon of water extracted one gallon must be used to refill.
  - SRP has biggest portion of portfolio (73%)
- Salt River Project
  - Modeling: always use stored water last.
- Central Arizona Project
  - Priority system
    - Priority 3-68 KAF
    - M&I priority 431 KAF
    - Indian Priority 318 KAF
    - NIA Priority 177 KAF
    - AG Pool 400 KAF
  - Tempe uses CAP for "off-project" uses (i.e. Tempe town lake property and Coca Cola)
  - Biggest energy user in Arizona
    - Pumping is expensive
- Ground Water
  - Artificial recharge
    - Long term storage credits (LTSC)
      - Need to take out as much as we put in
  - Incidental recharge
  - Natural recharge
  - 10% of yearly water
- Recharge/ effluent/ LTSC

- Artificial recharge
- Use CAP water as 'savings account' because SRP doesn't not allow saving
  - But, more development along river, so cannot recharge as much
- Demands – today and tomorrow
  - Basically 50% is residential
    - Different than Gilbert, Mesa, Chandler (who have 70% res.)
  - Changes in demand over last 16 years
    - Residential usage going down per household
      - Efficient irrigation
      - Conservation efforts
      - Efficiency standards
  - Future needs
    - On-project: supplies are projected to meet all possible scenarios of growth
    - Off – project: supplies will need to include the use of Reclaimed Water
- Takeaway: Effluent is liquid gold!
- All development have to retain on-site 2 hours hundred year storm worth of storm water

#### **Agenda Item 5 – Utility Rate Study**

Marilyn DeRosa presents about utility rate study

- Issue has been single family residential rate structure
- Traditionally had inclining block rate
- Build utility for peak demand
- Recommend 5 tiers to council:
  1. Average indoor use for family of (2 ½)
    - 0-6000 gallons
  2. Larger family (5 ½ - 6)
    - 6,000-12000 gallons
  3. Average size parcel (2,000 sq.ft)
    - 12,000 - 20,000 gallons
  4. Average size parcel (6,500 sq.ft)
    - 20,000-40,000 gallons
  5. Discretionary
    - > 40,000 gallons
- Peak is 2.2 times average demand
- Plants are built twice the size they would have to be to handle peak flows
  - Parts of distribution are also overbuilt
- Presentation to Council in 2 weeks
- Pros of 5<sup>th</sup> tier
  - New price signal starts at 40,000 gallons, which is a feasible goal to get 60,000 gallons user to.
- Jung suggestion for presentation
  - Present as stacking usage
- No values in presentation

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

Braden Kay updated sub-committee on working with landscaping architect

- Able to change design of front so that sidewalks don't go through
  - So great planting area that is fed by cistern (showcase)
- Bob question: any pervious concrete?

- Some pervious concrete
  - Because whole project is in retention basin didn't make that much sense to spend a lot on making pervious concrete
  - But, according to Bob, pervious concrete can hold fire trucks.

**Agenda Item 7 – Future Agenda Items**

- Review values guiding principles and programmatic outcomes for next meeting.
  - Everyone bring their notes.
  - 20 minutes in next agenda to create draft number 2.
  - Alix will send to Braden who will send to everyone
  - Think about how to make more concise
- Everyone bring broader principles that will inform goals
- Familiarize ourselves with water commission mission statement
- Next meeting: September 5<sup>th</sup> 4:30-6 pm
  - Goals of guiding principles documents (get this solidified)
  - Fire station update.
  - At public works

Jung made motion to end meeting, Chair Monty seconded.  
Meeting ended at 6:41

Prepared by: Braden Kay  
Reviewed by: