



Citizens' Water Advisory Committee
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Citizens' Water Advisory Committee MINUTES

The regular meeting of the Citizens' Water Advisory Committee was called to order by James Barry, Chair, on Wednesday, June 4, 2008, at 7:30 a.m., in the City Information Technology Building, 481 West Paseo Redondo, First Floor, Pueblo Conference Room, Tucson, Arizona.

1. Call to Order

Members Present:

Tina Lee
Carol Zimmerman
Bruce Billings
Vince Vasquez
Corina A. Baca
Evan Canfield
Martin M. Fogel
James T. Barry, Chair
Sarah Evans, Vice Chair
Thomas Meixner
James Horvath
Daniel Sullivan
Martha Gilliland

Appointed by:

Ward 1
Ward 2
Ward 3
Ward 4
Ward 5
Ward 6
Mayor
City Manager
City Manager
City Manager
City Manager
City Manager
City Manager

Members Absent:

Ursula Kramer
Daniel Samorano

Appointed by:

City Manager
City Manager

Others Present:

Karen Masbruch, Interim Tucson Water Director
Chris Avery, Interim Tucson Water Deputy Director
Bruce Johnson, Tucson Water Deputy Director
Pat Eisenberg, Tucson Water Department Administrator
Sandy Elder, Tucson Water P&E Administrator
John Thomas, Tucson Water Management Coordinator
Holly Lachowicz, Ward 3 Administrative Assistant
Fernando Molina, Tucson Water Conservation/Info Supervisor
Val Little, Director, Water Conservation Alliance of Southern Arizona
Nicole Ewing-Gavin, City Coordinator for the Oversight Committee
Tiki Lawson, Recording Secretary, City Clerk's Office

Chair Barry welcomed the newest CWAC member, Martha Gilliland, who was a City Manager appointee.

2. Announcements

No one spoke

3. Call to Audience

No one spoke.

4. Approval of Minutes: May 7, 2008

Motion, duly seconded, to approve the minutes of May 7, 2008, with the following corrections: page 5, second paragraph, third line, change the word ~~avoidable~~ to **deferrable**, page 6, third paragraph, first line, change the word ~~Committee~~ to **Study** and on page 6, fifth paragraph, add the word **Southwest** to Hydrology Magazine. Passed by a voice vote of 13 to 0.

5. Director's Report

Karen Masbruch, Interim Director of Tucson Water spoke.

a) Mayor and Council items

Ms. Masbruch said there were only two items before Mayor and Council last month. On May 20, 2008, there was a Public Hearing on new water rates. The new rates and new conservation fee were approved by Mayor and Council with the new rates going into effect July 7, 2008.

In addition, the water conservation program fund that the Mayor and Council approved on May 20 would be formally established by resolution on June 24, 2008.

On June 3, 2008 there was a discussion of available water resource tracking in which the Mayor and Council approved creating a "water checkbook balance" process in which they would receive an annual update on the volume of Tucson Water's renewable water resources available for future development.

b) Other: Recruitment Process for new Director

Ms. Masbruch advised that the flyer advertising this position was complete. The position had been publicized with a national search firm. In addition, she asked the CWAC members to make recommendations on qualified candidates.

6. Update on City/County Water & Wastewater Study Oversight Committee

Nicole Ewing-Gavin, the Committee's City coordinator, advised that the Committee submitted its Water Study Progress Report to the Mayor and Council as well as the Board of Supervisors last week, which was their first 60-day milestone. The report contained recommendations for an inclusive and transparent process to ensure public involvement.

The Water Study Progress Report may be viewed on the Committee's web site at www.tucsonpimawaterstudy.com. The Committee will hear from staff as well as outside experts on various topics related to water and wastewater. The report emphasized the

distinction between Phase I and future Study phases. Phase I is focused on fact gathering in order to set the stage for later discussion. The Report also mentioned ways in which the Committee would like to engage the public such as its web site. There was an email notification list of about 1,200 individuals compiled to advise the public of meetings as well as information recently posted to the web site. The meetings would be videotaped in the near future and posted on line as well for those who wanted to view a presentation. All of the presentations would be assembled into a report that would be drafted in Fall 2008 and sent to Mayor and Council and the Board of Supervisors by the end of the year. The first presentation would be on June 11, 2008 and consist of staff in addition to Larry Dozier from the Central Arizona Water Conservation District (CAWCD), who would be the outside expert. The topic would be an overview of water and wastewater systems within an historical and regulatory framework. Following this, the Committee would be meeting about every two weeks. The next presentation would be June 25, 2008 and focus on water resources.

Ms. Ewing-Gavin said the Committee was trying to reach out and work with other jurisdictions and providers. Mayor and Council and the Board of Supervisors had requested that other jurisdictions and water providers be invited to begin their own Phase 1 study of the kind that the Committee was doing. With that in mind, the Committee had sent a second letter to other utilities and offered to share its template for collecting data.

Chair Barry said there were four CWAC committee members on this new Oversight Committee: Tina Lee, Daniel Sullivan, Carol Zimmerman and himself. He had become Chair of that Committee as well.

Kathy Chavez, Regional Drought Group (RDG) Coordinator asked if there was any way the Committee's web site could be linked to the Tucson Water web site. This would make it even more accessible to the public.

Chair Barry said the Committee envisioned periodic updates; those currently planned were for August, October and December 2008, assuming that this timeframe could be maintained.

7. Report on CWAC Scheduling and Agenda Items from September 2008 to June 2009

Vice-Chair Evans distributed a handout covering tentative presentation topics for FY 2008-2009. This was a draft so if anyone had anything else to include, it could be incorporated. Ms. Evans commented on the contents, differentiating between the Tucson Water budget agenda items and other presentation topics beneficial to the community in terms of extending knowledge and awareness of water issues. These latter topics had been scheduled from September through December 2008. Various individuals had been approached to speak before CWAC during the Committee's upcoming calendar year. In addition, the ongoing agenda items for each meeting would include the Director's Report and the Water/Wastewater Study update. Suggestions for future topics included:

- The inclusion of the upcoming Bureau of Reclamation Report from Committee Member Zimmerman
- The water resources checkbook upon its finalization from Committee Member Vasquez.
- The issue of water quality standards and an overview of Tucson Water operations from Committee Member Lee.

Chair Barry said that in December 2008 there would be the usual elections for Chair and Vice-Chair. In addition, he said he thought that after today's presentations on drought, it would be a subject CWAC would want to revisit in the future.

8. Presentations on Drought

Committee Member Meixner introduced the first presenter, Gregg Garfin, the Deputy Director of Science Translation and Outreach at the University of Arizona's Institute for the Study of Planet Earth. He said that Mr. Garfin was an expert in climate and drought with particular emphasis on the southwest.

Mr. Garfin began his talk on the current drought status by defining drought as its impact not just as a lack of water. He said it was not often wise to ask a climatologist about drought but he would try to include some good news and the short term effect on climate change.

Showing the most recent drought status maps from the State's Monitoring Technical Committee, Mr. Garfin said that monitoring was based on two time scales: short term which covered a period less than a year and long term which covered a two to four year time scale. He said they were in the process of reviewing the system of calculating drought status, and by the end of the year they should have some recommendations for change.

Mr. Garfin said that recent precipitation had been good throughout parts of Arizona as shown in maps of the North American Drought Monitor that covered Canada and Mexico. Central Mexico showed a significant drought.

The U.S. Drought Monitor is published weekly and includes input from over three hundred experts on drought status from around the U.S. These experts' measurements used a variety of indicators including stream flows and reservoir levels. Mr. Garfin also discussed the regional outlook and accumulated precipitation at the Tucson airport with boosts over While the monsoon season and late Fall and Winter 2007 kept Tucson over the annual average, precipitation was below average at the airport, and most of Pima County was roughly at eighty to ninety percent of average precipitation. During February, March and April, conditions dried out rapidly.

Mr. Garfin mentioned the resources of the Vegetation Drought Response Index and the National Oceanic & Atmospheric Administration's (NOAA) National Weather Services for climate forecasts and estimates on precipitation.

He said the good news was the recent higher amount of rain and snowfall in the Colorado River basin. Mr. Garfin put this information in a longer term perspective with a map of annual precipitation for southeastern Arizona over the last hundred years showing that the last couple of years have had average precipitation.

With regard to reservoir capacity, Lake Powell and Lake Mead were still at roughly half their capacity. The San Carlos Reservoir was at about forty percent capacity which was more than it had been for about eight years. Mr. Garfin explained that, since 1999, there had only been one year of above average inflow. Throughout the west, the reservoir capacity, with the exception of Arizona, was below average. The streamflow forecasts for the upper Colorado River basin had been revised downward because beginning in March 2008 there was no substantial precipitation in this area.

Mr. Garfin then discussed the above normal fire potential forecast for much of the southern part of the southwest. The major concern was that the monsoon in Arizona was very wet last year and all that new growth had dried out which increased the potential for fires to

spread. Weather conditions produced by El Nino and La Nina were discussed as factors in drought assessment. Cool ocean temperatures were characteristic of La Nina which usually gave dry conditions in the southwest. La Nina was still lingering but slowly fading out. There was the possibility of El Nino appearing soon which was associated with wet winters.

The NOAA Climate Prediction Center said that drought would persist in certain areas of California. The forecast methodology used a specific algorithm to select and analyze years in the past with a sequence of ocean temperature and atmospheric circulation. This method concluded that the monsoon was likely to start earlier this year and be slightly wetter than normal. Mr. Garfin also compared the U.S. figures with those of Mexico.

In conclusion, Mr. Garfin said that people might have heard that this winter some NASA scientists determined that decades of variations in ocean and atmosphere circulation kicked into its negative mode. The last time this happened coincided with the drought in the 1950's and 1960's. Currently, Arizona was in a dry period and if this persisted as per these scientific observations, the community may be in for several more years of drought conditions.

Committee Member Meixner introduced the next speaker, Mike Crimmins, an Assistant Professor and Cooperative Extension Specialist at the University of Arizona in the Department of Soil, Water and Environmental Sciences. As a climatologist, Mr. Crimmins' expertise in cooperative extension was in helping resource managers, ranchers and farmers across the State deal with drought impact.

Mr. Crimmins spoke about a project in development and in conjunction with counties all over Arizona including Pima County entitled "Arizona Drought Watch: Arizona's Drought Impact Reporting System". Mr. Crimmins said impact monitoring was a key of the Local Drought Impact Group (LDIG), a part of the state's operational state plan that Gregg Garfin was instrumental in helping to develop. Counties develop groups with the fundamental task of paying attention to drought. He said that they were actually the first place in the country at the local level to try and develop a system to document drought impact.

Mr. Crimmins said he actually had very little data to actually work with when characterizing drought. To really know what was going on with drought conditions, they needed to know what impacts were occurring which meant eyes on the ground. Paying attention to drought was a reflection of local conditions, assessing connections to climate and developing an understanding of the community's sensitivity to climate in order to assess local vulnerability. The idea of developing a drought impact reporting system was a grass roots effort. The initial effort involved adapting the checklist from the Colorado Drought Plan. This developed into building mock-up systems to gain feedback on system design, features and general structure in addition to continued interaction with LDIGs to guide development process. The web site is: www.azdroughtwatch.org which evolved from the Pima County meeting when this initiative was entitled Drought Impact Reporting System (DIRS).

Mr. Crimmins went on to say that the AZ Drought Watch was currently working on some of the reporting functions so that in a few months it would all come together. This system was designed to collect qualitative reports of drought impacts across Arizona, and was based on an impact checklist. It included six categories related to drought:

- Water Resources and Hydrology
- Agricultural Impacts (Food crops, cash crops and aquaculture)
- Ecological impacts
- Livestock production and grazing land impacts
- Societal and community impacts
- Tourism and recreation

Feedback and impact information collected through this system would be used in conjunction with hydroclimatological data to assess changes in drought status across Arizona on a monthly basis. The number of impact observations were tallied by large watersheds across the State which were reflected on maps viewable on the site.

In conclusion, Mr. Crimmins added they were currently in the process of identifying key impact reports (by watershed and sector) to make sure there were field experts engaged. There were training workshops, developing monthly and quarterly reports with additional reports based on requests to the reporter email list.

Kathy Chavez, the Pima County Regional Drought Group (RDG) Coordinator took everyone through the Pima County web site showing the available relevant drought information (<http://www.pima.gov/drought/>). One example was the Governor-approved drought program of the Arizona Department of Water Resources (ADWR). Ms Chavez discussed the different components of the program. The different counties, municipalities and water providers met approximately every other month, along with representatives from the United States Geological Survey, the National Weather Service, and City departments including Tucson Water and Parks and Recreation. It was a good group to share information about what was going on at the local drought level.

Ms. Chavez pointed out that the Pima County drought home page has links to ADWR's statewide drought program, where monthly drought status reports for the state can be found. The state report covers a variety of items including reservoir storage status and mountain precipitation that are germane to Pima County. The State also established a drought monitoring technical committee which reviewed reports and asked the RDG if the science data matched with what they saw on the ground. If it was known that water was being wasted, the health department could be contacted to investigate.

Ms. Chavez said that, in terms of what defined drought, basically it was temperature and precipitation. More importantly, she said that the impact of drought could cover a lot of sectors including:

- Agriculture
- Ranches
- Recreation
- Ecological → fire danger
- Water Resources → higher water use in Summer

Pima County and the City of Tucson (Tucson Water) had declared a drought stage level one for Summer 2007. While other local water providers have different criteria and capabilities for dealing with drought, the majority of local water providers were also at drought stage one, which provides a consistent message to the community in terms of drought conditions.

In conclusion, Ms Chavez shared water reduction suggestions that were also on the web site as well as the Water Casa web site. She said the next Regional Drought Group meeting was on July 23, 2008 at the main library.

Chris Avery, Interim Deputy Tucson Water Director, discussed Tucson Water's Drought Preparedness and Response Plan. From the Utility's perspective, the more flexibility it can maintain and the different resources the Utility could use as part of its portfolio of water supplies, the better able it would be to deal with drought conditions.

Questions were then directed to today's presenters.

9. Cancellation of July and August Meetings.

Motion, duly seconded, to cancel the July and August 2008 CWAC meetings. Passed by a voice vote of 13 to 0.

10. Call to the Audience

No one spoke.

Committee Member Canfield mentioned that the Conservation Education Subcommittee would like to have a meeting later in June 2008 to review the Community Conservation Task Force (CCTF) implementation.

John Thomas, Management Coordinator announced that another orientation tour of various water facilities would take place Monday, June 23, 2008, for those who were interested in taking part.

Chair Barry thanked today's presenters.

11. Adjournment – 8.55 a.m.