

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
WATER QUALITY ADVISORY COMMITTEE MEETING

Thursday, July 23, 1998
MAG Office Building
Phoenix, Arizona

MEMBERS ATTENDING

James Kaylor, City of Glendale, Chairman	Jack Watson for Michael Maurer, University of Arizona Cooperative Extension
*Esmie Azila, City of Avondale	Joe Jason for John Power, Maricopa County Department of Environmental Services
Jacqueline Strong, City of Chandler	
Leonard Rivera, City of El Mirage	*Ajay Shah, Motorola
*Lonnie Frost, Town of Gilbert	Mark Courtney, Phoenix Chamber of Commerce
Dale Alimena for Bill Haney, City of Mesa	*Ray Hedrick, Salt River Project
*Kevin Kadlec, City of Peoria	*Gene Cetwinski, Valley Forward Association
Bob Hollander, City of Phoenix	*Eugene T. Jensen, Citizen Representative
*Jim Nelson, City of Scottsdale	Laura Watson, Citizen Representative
Barbara Olivieri, City of Tempe	*Elaine Arena, Citizen Representative
John Boyer, Arizona Public Service	
*Steve Hildreth, Arizona State Land Department	

*Those members neither present nor represented by proxy.

OTHERS PRESENT

Jerry Rathke, Arizona Department of Water Resources	Ron Williams, CH2M Hill
Lorraine Borro-Ayers, Arizona Department of Environmental Quality	Nick Taratsas, Del Webb
John Hathaway, Arizona Department of Environmental Quality	Crystal Thompson, Central Arizona Project
Elizabeth Boettcher, Arizona Department of Environmental Quality	

James Kaylor, City of Glendale, Chairman, announced that since a quorum was not present a discussion would begin with Agenda Item 2.

2. Approval of April 2, 1998 Meeting Minutes

The Committee reviewed the minutes from the April 2, 1998 meeting. No comments or corrections were made.

3. MAG 208 Water Quality Management Plan Amendment for the Villages at Desert Hills Wastewater Treatment Facility

Nick Taratsas, Del Webb, indicated that Del Webb has proposed a wastewater treatment facility that would serve a new development, the Villages at Desert Hills, located in Maricopa County. Mr. Taratsas offered to answer any questions on the facility and indicated that Ron Williams, CH2M Hill, would give a presentation on the facility.

Chairman Kaylor asked for clarification on whether all of the effluent would be either reused or recharged.

Mr. Taratsas indicated that all of the effluent would be either reused or recharged.

Ron Williams, CH2M Hill, gave a presentation on the Villages at Desert Hills Wastewater Treatment Facility. He indicated that CH2M Hill was working with Del Webb to design and construct the Villages at Desert Hills Water Campus. The water campus includes the water treatment and wastewater treatment facilities for the development. Mr. Williams indicated that the proposed development would be located in the unincorporated area of Maricopa County east of Interstate 17, between Pioneer Road and Desert Hills Road, with the westerly portion of the development falling within the incorporated limits of the City of Phoenix. The development is zoned to allow for 14,000 units, however, the current plan is to build 11,000 units and provide more open space.

Chairman Kaylor asked what the estimated population would be for the area.

Mr. Taratsas indicated that the population could reach an estimated 45,000 people if 14,000 units are constructed. He also indicated that the current plan was to build only 11,000 units which would reduce the number of residents in the area.

Mr. Williams indicated that the wastewater treatment facility would be developed in eight phases. The initial phase would be a temporary facility with a capacity of 0.5 million gallons per day (mgd). The permanent facility would then be constructed and increments in capacity would vary from 0.5 to 1 mgd until the facility was operating at a full capacity of 4.5 mgd. The construction of the permanent facility is scheduled to begin in 2000. The facility is designed to meet the State wastewater treatment plant design criteria. Mr. Williams also indicated that the facility is designed to meet the specific needs of Del Webb and the residents they intend to attract to the development. Therefore, the facility is designed to be aesthetically pleasing and odorless. The facility also provides flexibility in capacity increases.

1. Call to Order

At this point, a quorum had been reached. Chairman Kaylor called the meeting to order.

3. MAG 208 Water Quality Management Plan Amendment for the Villages at Desert Hills Wastewater Treatment Facility (continued)

Mr. Williams continued with his presentation. He indicated the treatment process will consist of influent pumping, screening, grit removal, secondary effluent filtration, disinfection, effluent pumping, sludge stabilization and sludge dewatering for landfill disposal. Effluent disinfection will occur utilizing on site generated sodium hypochlorite. Waste sludge will be dewatered utilizing on site vacuum drying beds. Both the interim and the proposed facility are activated sludge systems utilizing an integral microfiltration membrane system. Mr. Williams indicated that the technology the plant will use is new and the benefits to this system include the ability to reduce the space needed for the facility and the improved separation of liquids and solids resulting in improved wastewater treatment.

Chairman Kaylor asked what type and capacity of effluent storage the facility will have.

Mr. Williams indicated that there would be one million gallons of effluent storage. He explained that the secondary disposal method would be through recharge and therefore only a limited amount of effluent storage is needed. Mr. Williams added that the water use needs exceed the amount of effluent that will be produced for the development and therefore all effluent would be utilized and additional sources of water, such as raw Central Arizona Project water, will also be utilized. Mr. Williams indicated that the effluent would be treated to a high quality that meets the State open access laws. The facility will receive various permits, some of which have already been obtained, from the Arizona Department of Environmental Quality, the Arizona Department of Water Resources, Maricopa County Flood Control District and Maricopa County Environmental Services Department. Finally, Mr. Williams indicated that Del Webb will own the facility and the Citizens Water Resources Company would operate it. Del Webb will transfer ownership of the facility to the Citizens Water Resources Company after the permanent facility is completed.

Chairman Kaylor asked if disinfection would be done with chlorine and if the water would be dechlorinated before it was reused or recharged.

Mr. Williams indicated that disinfection would be done with chlorine and that there would be no dechlorination at this time. He also indicated that the permanent facility will use ultraviolet disinfection.

John Boyer, Arizona Public Service, asked where the facility was in the State permit process.

Mr. Williams indicated that the facility is under technical review and that after the review is completed a draft permit will be produced. Mr. Williams did not have a specific time line for the recharge permits since the effluent recharge permit is being handled by another consultant.

Bob Hollander, City of Phoenix, asked if there would be sufficient area for reuse during the winter

months.

Mr. Williams indicated that the reuse of effluent during the winter months should not present a problem. In addition, since there is a tremendous amount of recharge capacity, disposal of the effluent would not become a problem. Mr. Williams indicated that there has been some consideration of applying for a National Pollutant Discharge Elimination System (NPDES) permit at a later date if necessary.

Mark Courtney, Phoenix Chamber of Commerce, asked if there would be enough wastewater to treat to avoid complications in the temporary facility using the new system.

Mr. Williams indicated that the system was designed to handle batches of wastewater to alleviate the problem of fluctuation in the amount of flow. Mr. Williams indicated that CH2M Hill has successfully designed these types of beds in other locations but that the operator, Citizens Water Resources Company, has expressed concern with this type of drying bed due to lack of experience on their part. Therefore, a centrifuge has been planned to be the permanent backup system that will be installed in 2000.

Mr. Hollander asked if the technology has been used successfully elsewhere in the nation.

Mr. Williams indicated that the process has been used extensively in Canada. In addition, the process is being used on leachate in the State of Washington. New facilities are currently being constructed in Colorado, California and Texas.

Jacqueline Strong, City of Chandler, asked where the water was going to be recharged.

Mr. Williams indicated that the recharge was going to occur within the City of Phoenix limits on the west side of I-17.

Jack Watson, University of Arizona Cooperative Extension, asked about the depth of the recharge beds and if flood control approval had been obtained.

Mr. Williams indicated that the effluent would be deposited into trenches below ground. He indicated that it is required by the State that three acres be designated around the recharge areas to allow for the impact of the recharging of water. This project designated ten acres for the impact area. Mr. Williams also indicated that the project has obtained flood control approval.

Chairman Kaylor indicated that this agenda item was for information, discussion and possible authorization to conduct a public hearing on the Draft MAG 208 Water Quality Management Plan Amendment for the Villages at Desert Hills Wastewater Treatment Facility. Laura Watson, Citizen, moved and Barbara Olivieri, City of Tempe, seconded that a public hearing be conducted for the Villages at Desert Hills Wastewater Treatment Facility.

Dale Alimena, City of Mesa, asked if this process has been utilized in an arid climate such as that found in the State of Arizona.

Mr. Williams indicated that there is a pilot project being conducted with the Bureau of Reclamation

but that there are no systems currently operating.

A vote was taken on the motion to authorize that a public hearing be conducted for the Draft MAG 208 Water Quality Management Plan amendment for the Villages at Desert Hills Wastewater Treatment Facility and it was unanimously passed.

4. Arizona Statewide Watershed Framework

Mr. John Hathaway, Arizona Department of Environmental Quality, gave a presentation on the progress of the Arizona Statewide Watershed Framework. He indicated that data collection efforts had begun in the Middle Gila Watershed. He also indicated that local governments have been collecting and examining data through the Sub Regional Operating Group.

Mr. Hathaway said that the next major step will be to decide the best forum for discussion of the watershed. He indicated that a lead organization such as a Council of Governments, the Sub Regional Operating Group steering committee and natural resources districts could be selected. He indicated that it is important to note that many people and organizations will participate in the effort and it could be difficult to coordinate all of the participants. Some planning efforts have consisted of sub watersheds nested in an overall watershed to assist in coordination and management of efforts.

Mr. Hathaway indicated that it is important to begin thinking about the forum in which this effort will take place. The Governor's Office will coordinate the effort at the State level but some decisions have yet to be made such as the size and the formality of the groups. The role of 208 planning and water supply planning will have to be examined to evaluate the best way to coordinate all of the efforts. Mr. Hathaway indicated that ADEQ has developed a vague framework but that the State does not want to dictate the process.

Ms. Watson indicated that many citizens do not understand the issues or the physical boundaries of the watersheds. She indicated that a newspaper article and public meetings might help provide information for the general public.

Mr. Hathaway agreed and indicated that some of these efforts were underway.

Mr. Watson indicated that Lynn Moore was a good contact because she was involved with water education for teachers in the school districts.

Ms. Watson also suggested a group named the Friends of the Gila River as a possible contact for information and involvement.

Chairman Kaylor indicated that the Sub Regional Operating Group gathered data on water and wastewater for a study on permitting that might be useful to the project. He also indicated that in the past there has been little coordination between water and wastewater efforts. Chairman Kaylor also indicated that public meetings are a good idea because they are proactive and good for the regulated community.

Mr. Hathaway indicated that a Source Water Assessment will be done to determine what type of

threat is present. He indicated that this effort was started as a result of the national Clean Water Action Plan initiated by United States Vice President Al Gore.

Ms. Watson indicated that the watershed planning effort would allow for an improved understanding of water issues in the Indian Communities as well and an improved understanding in diversity.

5. Central Arizona Project Presentation

Crystal Thompson, Central Arizona Project, gave a presentation on the history of the Central Arizona Project (CAP), its current operations and memberships and the organization's water management goals for the future. Ms. Thompson indicated that the project is managed by the Central Arizona Water Conservation District and that the decision makers consist of an elected board of members. Ms. Thompson explained that the project developed over a number of years out of dispute with other southwestern states about water rights. She indicated that the project serves three counties: Maricopa, Pinal and Pima. Ms. Thompson explained the structure of the project and provided information regarding the users of CAP water. Ms. Thompson indicated that there were several recharge projects operating or being constructed along the project. The goals of the CAP are to deliver its capacity, protect Arizona's entitlement and secure the future of Arizona's water supply.

Chairman Kaylor asked how close Arizona is to using the full entitlement.

Ms. Thompson indicated that they were getting close and finding new ways to use water. She indicated that this is important because California and Nevada have claimed that they may ask the federal government to revisit the water allocations for the states.

Ms. Watson asked if Arizona has started paying back the federal government for the project.

Ms. Thompson indicated that payments have been made but that the Arizona Department of Water Resources and CAP are meeting to settle disputes on the payment plan devised in an agreement.

Mr. Watson asked what percentage of the water was going to agricultural use. He indicated that nearly all of the water used for agricultural purposes is recharged.

Ms. Thompson agreed that recharge of water was not always direct and that a portion of the water is recharged through agricultural use.

Ms. Thompson also indicated that Nevada has indicated that it may be interested in asking Arizona to store a portion of the Nevada allocation of water.

6. 208 Water Quality Management Planning in Other States

Drenan Dudley, Maricopa Association of Governments, gave a presentation on 208 Water Quality Planning in the MAG region and in other states. Ms. Dudley indicated that in Section 208 of the Clean Water Act there is a requirement for states to develop and implement areawide water quality management plans. Governor Jack Williams designated MAG to serve as the Regional Water Quality Management Planning Agency for the Maricopa County area in 1974. The MAG Regional Council

adopted the first 208 Water Quality Management Plan in 1979. Ms. Dudley indicated that the Plan contains two main elements. The Point Source element identifies the preferred wastewater collection and treatment system and the Nonpoint Source element identifies possible sources of pollution and provides groundwater quality data. Ms. Dudley indicated that the Point Source element of the plan was updated in 1982 and the entire plan was updated in 1993.

Ms. Dudley indicated that ADEQ will not grant a permit to construct a facility if it is not consistent with the 208 Plan. Facilities may be added to the Plan through the Small Plant Review and Approval Process or the amendment process. Only the jurisdiction in which the facility is located may request either process. Local jurisdictions have the first right of refusal to ensure that new proposed systems do not negatively impact municipal systems and cause environmental problems. Ms. Dudley indicated that stakeholders in the State Unified Water Quality Permit Rewrite Project agreed that the process was valuable in that it allows local government control and assistance in addressing growth and infrastructure capacity.

Ms. Dudley also indicated that there is variety in the approach other areas take toward the 208 planning process. The Federal government has indicated that it is not emphasizing the enforcement of 208 requirements as aggressively as before since funding is no longer attached to the effort. Ms. Dudley indicated that six states were contacted regarding the 208 process and that many of them had different approaches to water quality planning. In Arizona, each of the Councils of Governments and one county have adopted 208 plans.

Ms. Dudley indicated that several items were identified as factors that influence the water quality planning process such as, the environment, growth rate, legislation, court orders, coordination with other planning efforts and funding. Finally, Ms. Dudley indicated that an overriding theme in conducting the research was watershed planning. The Clean Water Action Plan outlines the federal approach to watershed planning and the Arizona Statewide Watershed Framework outlines the Arizona approach to watershed planning.

Mr. Watson asked that a copy of the presentation be provided for use by the members as an information guide.

Ms. Watson moved and Mr. Courtney seconded and it was unanimously passed that the meeting be adjourned.

The meeting was adjourned by Chairman Kaylor at 12:00 p.m.