

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

Tuesday, November 30, 2004  
MAG Office Building  
Phoenix, Arizona

MEMBERS ATTENDING

Roger Klingler, Scottsdale, Chair	Phoenix: Robert Hollander
Avondale: Greg Stack	Surprise: Rich Williams
#Chandler: Jacqueline Strong	*Tempe: David McNeil
Gilbert: Lonnie Frost	Maricopa County: Dale Bodiya for John Power
Glendale: Chris Ochs	Pinnacle West Capital: John Boyer
Goodyear: Barry Hess	*Salt River Project: Ray Hedrick
#Mesa: Bill Haney	*U of A Cooperative Extension: Patrick Clay
#Peoria: William Matting for Steven Bontrager	Citizen Representative: Eugene Jensen

\*Those members neither present nor represented by proxy.

#Attended by videoconference or by telephone conference call.

OTHERS PRESENT

RT Engineers: Raj Thakur	RBF Consulting: Brandon Squire
Carollo Engineers: George Shirley	Kennedy/Jenks: Fred Goldman
RT Engineers: Kevin Elverum	Newport Development: Matt Montgomery
Saddle Mountain Unified School District: Galen Waterson	Courtland Homes: John Wittrock
Fluid Solutions: Kathy Mills	Courtland Homes: Brian May
Hubbard Engineering: Doug Hubbard	Stardust Companies: Bob Speirs
City of Glendale: Ken Reedy	Curtis Engineering: E.H. Ted Curtis
City of Glendale: Glenn Compton	A-N West, Inc.: Gerald Copeland
DEA: Bill Roberts	Earl, Curley, & Lagarde: Stephen Earl
City of Phoenix: Aimee' Conroy	Maricopa Association of Governments: Julie Hoffman
Maracay Homes: Tim Goodrich	Maricopa Association of Governments: Cathy Arthur
PBS&J: Frank Turek	Maricopa Association of Governments: Brenda Day
Sonterra Partners: Bob Wagoner	
RBF Consulting: Jared Carr	

1. Call to Order

A meeting of the MAG Water Quality Advisory Committee was conducted on Tuesday, November 30, 2004 at 4:00 p.m. Roger Klingler, Chair, City of Scottsdale, called the meeting to order.

2. Agenda Announcements

Chair Klingler provided an opportunity for member agencies to report on activities of interest in their agencies.

3. Call to the Audience

Chair Klingler provided an opportunity for members of the public to address the Water Quality Advisory Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG or items on the agenda for discussion but not for action.

4. Approval of the June 30, 2004 Meeting Minutes

The Committee reviewed the draft minutes from the June 30, 2004 meeting. Dale Bodiya, Maricopa County, moved and Chris Ochs, City of Glendale, seconded, and it was unanimously carried to approve the June 30, 2004 meeting minutes.

5. Draft Small Plant Review and Approval for the Proposed Expansion of the Ruth Fisher School Wastewater Treatment Plant

Kathy Mills, Fluid Solutions, provided an overview of the Draft Small Plant Review and Approval for the Proposed Expansion of the Ruth Fisher School Wastewater Treatment Plant as part of the MAG 208 Plan. Ms. Mills indicated that the existing Ruth Fisher School plant is identified in the current MAG 208 Plan for a 15,000 gallon per day capacity. The plant is located in Tonopah, between the White Tank Mountains and the Maricopa County border. The plant is eight miles from Buckeye, the nearest town. The proposed plant expansion to 45,000 gallons per day would assist in accommodating a new high school and an elementary school expansion.

Ms. Mills indicated that the expanded plant would include facility upgrades to enable recharge in addition to existing irrigation reuse. Currently, the plant disposes Class B effluent into a leach system. The upgraded facility would produce Class A+ effluent. The plant design and components were discussed and an illustrated plant site map and process flow diagram were provided. For effluent reuse, ball field irrigation and landscaping alternatives were selected. For recharge, the facility design includes infiltration basins, dry wells, and injection wells. The estimated plant construction and capital costs would be financed through school bond funding. The plant is currently operated by a contract operator and operation of the expanded facility would also be contracted out.

Robert Hollander, City of Phoenix, inquired whether they would build onto the existing plant or completely replace it.

Ms. Mills indicated that they would replace the existing plant and an existing plant component would be turned into an aerobic digester.

William Mattingly, City of Peoria, inquired what type of underground chambers would be used.

Ms. Mills indicated that plastic pipes similar to those used for stormwater and septic systems would be used measuring 36 inches wide and 12 inches high and containing side vents for water flow.

Lonnie Frost, Town of Gilbert, inquired whether the small plant flows would go to a regional

plant in the future.

Ms. Mills indicated that the small plant flows would be sent to a regional plant if one became available in the future, although no regional facility plans currently exist.

Mr. Ochs moved to recommend approval of the proposed expansion for the Ruth Fisher Wastewater Treatment Plant as part of the MAG 208 Water Quality Management Plan. Rich Williams, City of Surprise, seconded, and it was unanimously passed through a roll call vote by the Committee.

6. Draft MAG 208 Plan Amendment for the City of Surprise Special Planning Area 3 Regional Wastewater Treatment Facility

Mr. Williams provided an introduction regarding the Draft MAG 208 Plan Amendment for the City of Surprise Special Planning Area (SPA) 3 Regional Wastewater Treatment Facility. He indicated that the City of Surprise is developing a master plan for water, wastewater, and reclaimed effluent and the Surprise Municipal Planning Area is divided into six Special Planning Areas. The City owns 105 acres for the proposed SPA 3 Regional Plant and another 35 acres will be dedicated by Courtland Homes. The City would hold all facility permits.

Mr. Williams indicated that the City anticipates fast paced development with seven to eight thousand new residential units in 2004, and wants to aggressively meet the associated challenges. The City's wastewater approach includes developer funding for initial development and City funding in future phases. The proposed regional plant would have a 30 million gallon per day ultimate capacity. Mr. Williams indicated that Raj Thakur, RT Engineers would provide an overview of the project.

Mr. Thakur indicated that the Surprise SPA 1 has an existing facility permitted for 7.2 million gallons per day. The Surprise General Plan 2020 provides a comprehensive development plan for all six Special Planning Areas. An illustrated map of the areas was provided. The City hired a consultant to prepare a technology evaluation report. He indicated that the City and the Austin Ranch master planned community are working with the Rio Rancho development for wastewater planning. He indicated that the Austin Ranch development would proceed with the Surprise regional plant regardless of the future direction for the Rio Rancho development.

Mr. Thakur indicated that the developer would construct Phase I of the regional plant with a capacity of 1.8 million gallons per day, and the City would construct subsequent future phases that integrate the Phase I structure. The plant would produce Class A+ effluent. The dewatered sludge would be Class B, and recharge basins onsite would be used for effluent disposal. Facility permits would include an Aquifer Protection Permit, County approvals, recharge and recovery permits, air quality permits, and an Arizona Pollutant Discharge Elimination System (AZPDES) permit to a water body such as the Agua Fria River. Facility construction is anticipated to begin in 2005 and be complete by 2006. The City will own and operate the plant for all phases.

Eugene Jensen, Citizen Representative, inquired about the plant location relative to Trilby Wash. He inquired how confident the City is regarding the plant and the 100 year flood design.

Mr. Williams indicated that a wash goes through the site, although it is not a Water of the United States. He indicated that the City will adequately protect for the 100 year flood levels.

Mr. Thakur indicated that Whitman conducted a study which considers the 100 year flood levels and Courtland Homes is evaluating optimal ways to divert the wash in relation to the plant location.

Mr. Jensen indicated that two floods had occurred in a five year period and the City should carefully investigate the hydrology of the area. He indicated that the City is doing a great job with the project and he would encourage them to ensure flood protection.

Mr. Williams indicated that the City will ensure adequate flood protection.

Chair Klingler inquired whether the Rio Rancho development would participate in treatment through the Surprise Regional Plant.

Mr. Williams indicated that, since the June 2004 Committee meeting, the City has worked with Courtland Homes and Maracay Homes, the potential builder for Rio Rancho development. He indicated that the City has obligations from previously signed documents. He indicated that the City is hopeful that the work over the last four months will enable Rio Rancho to hook up to the Surprise Special Planning Area 3 Regional Plant. He indicated that, regardless of the future of the Rio Rancho development, Austin Ranch will move forward to participate in the regional plant.

Chair Klingler inquired whether the regional plant would serve only Special Planning Area 3.

Mr. Williams indicated that it would. He indicated that each Special Planning Area would have its own regional plant, and the City is working on the plant design for Special Planning Area 2.

Mr. Frost indicated that 30 million gallons per day seems high for the anticipated flows to the plant and inquired whether the City agreed.

Mr. Williams indicated that it is difficult to be sure exactly when development will occur, and the City relied on currently available data and assumptions in planning the facility.

Chair Klingler inquired whether surrounding cities may possibly use the Surprise regional plant.

Mr. Williams indicated that it is anticipated that the regional plants in Surprise be used only for flows from Surprise with the exception of the Glendale temporary agreement which is also on the Committee agenda.

Mr. Hollander moved to authorize that a public hearing be conducted on the Draft MAG 208 Plan Amendment for the City of Surprise Special Planning Area 3 Regional Wastewater Treatment Facility. Mr. Jensen seconded and it was unanimously passed through a roll call vote by the Committee.

7. Draft MAG 208 Plan Amendment for the Town of Buckeye Palo Verde Road Wastewater Treatment Facility

Brandon Squire, RBF Consulting, provided an overview of the Draft MAG 208 Plan Amendment for the Town of Buckeye Palo Verde Road Wastewater Treatment Facility. Mr. Squire indicated that the proposed Palo Verde Road plant is needed to accommodate flows from future developments in Buckeye such as Westwind and Silver Rock. The existing Buckeye Wastewater Treatment Plant on Beloit Road does not have line capacity for these developments and the cost to run new lines from the plant to the new developments would exceed the cost of constructing the new Palo Verde Plant. The existing Buckeye Sundance plant and Lewis Prison Complex plant are not close enough to service the area.

Mr. Squire indicated that the proposed Palo Verde plant would be located in the southwest corner of the development at Palo Verde Road, one half mile south of Broadway. Reclaimed effluent would be disposed primarily through reuse and recharge. As a secondary method, an AZPDES permit discharge may occur to the Hassayampa River or Roosevelt Irrigation District Canal. The Town of Buckeye would own and operate the plant and hold all permits. The developers will finance Phase I of plant construction and a share of future plant development. Any operation and maintenance shortfalls would be met by the developers.

Mr. Squire indicated that facility permits would include an Aquifer Protection Permit, County approvals, reuse and recharge permits, an AZPDES permit and a sludge disposal agreement. The anticipated flows from the development were discussed. Mr. Squire introduced Fred Goldman, Kennedy Jenks, to provide detailed illustrations regarding the batch reactor, and plant components at each phase. Mr. Goldman indicated that the plant would be designed to meet challenges associated with low startup flows.

Mr. Hollander inquired how sludge would be managed at the 10.2 mgd buildout phase.

Mr. Goldman indicated that the sludge would be dewatered and treated to Class B standards on site, and hauled to a landfill or used for land application in permitted areas.

Mr. Mattingly inquired about the minimum capacity needed to operate the batch reactor.

Mr. Goldman indicated that the batch reactor could operate at flows as low as 10,000 to 20,000 gallons per day.

Mr. Mattingly inquired whether solids would be hauled at the low flow points.

Mr. Goldman indicated that they would have the capability to haul liquid solids at that point, although the plant is designed to handle even very low flows.

Barry Hess, City of Goodyear, moved to authorize that a public hearing be conducted on the Draft MAG 208 Plan Amendment for the Town of Buckeye Palo Verde Road Wastewater Treatment Facility. Mr. Frost seconded and it was unanimously passed through a roll call vote by the Committee.

8. Draft MAG 208 Plan Amendment for the City of Glendale Temporary Sewer Service Agreement and Future Water Reclamation Plant Correction

Chair Klingler indicated that agenda item seven was for information, discussion and possible authorization to conduct a public hearing on the Draft MAG 208 Amendment for the City of Glendale Temporary Sewer Service Agreement and Future Water Reclamation Plant Correction. Chair Klingler introduced George Shirley, Carollo Engineers, to provide an overview of the draft amendment.

Mr. Shirley indicated that the draft amendment is composed of two parts. First, the amendment defines an area within the Glendale Municipal Planning Area (MPA) where temporary sewer service will be provided by the City of Surprise. Second, the amendment includes a correction to the 208 Plan to delete a future Arizona American Water Company Water Reclamation Plant with an ultimate capacity of eight million gallons per day and sewer service area within the western portion of the Glendale MPA.

Mr. Shirley stated that an InterGovernmental Agreement between the City of Glendale and the City of Surprise has been executed that allows the Cortessa and White Tanks Foothills developments, within the Glendale MPA, to receive sewer service from Surprise. He added that Surprise has issued a "Will Serve" letter indicating that the City will provide sanitary sewer service to the specified developments. Mr. Shirley showed the location of the two developments in relation to the Glendale MPA and Surprise MPA. Illustrations were also presented of the Cortessa and White Tanks Foothills Sewer System, Conceptual Site Master Plan of the South Surprise Wastewater Treatment Plant, and Surprise Special Planning Area (SPA) 1 build-out sewer system.

Mr. Shirley asked for confirmation that the South Surprise WWTP currently has a capacity of 7.0 mgd. Mr. Williams responded that the plant is permitted for 7.0 mgd. Mr. Shirley stated that the plant will be expanded in the future to accommodate growth in Surprise SPA 1. He indicated that the Town of Buckeye, unincorporated Maricopa County, and the City of Surprise are all within three miles of the Cortessa and White Tanks Foothills developments and do not object to the proposed amendment.

Mr. Shirley discussed the correction to the 208 Plan to delete a future Arizona American Water Company Water Reclamation Plant with an ultimate capacity of 8.0 mgd and sewer service area within the western portion of the Glendale MPA. He indicated that the plant was proposed by Arizona American Water Company in late 2001; however, it was not considered by the Glendale City Council.

Mr. Shirley mentioned the text to be deleted from the 208 Plan as a result of the correction. The service area for this plant is defined on the north by Peoria Avenue, on the west by Perryville Road, on the south by Camelback Road, and on the east by Loop 303 and Reems Road. The Town of Buckeye, City of Goodyear, Litchfield Park, and Luke Air Force Base are within three miles of this amendment item and have all indicated that they do not object to the proposed amendment.

Chair Klingler inquired if the City of Glendale will service the area associated with the future

Arizona American Water Company Water Reclamation Plant once the plant is deleted from the 208 Plan. Mr. Shirley responded that Arizona American Water Company does not seem to be actively pursuing the planning of the plant.

Mr. Boyer asked when the City of Glendale will be able to provide sewer service to the Cortessa and White Tanks Foothills developments. Ken Reedy, City of Glendale, responded that the InterGovernmental Agreement between the City of Glendale and the City of Surprise has a term of 25 years. However, on December 7, 2004, the Glendale City Council will meet and potentially decide on the planning of the area that is west of 115th Avenue and strip annexed by the City of Glendale. He added that within four to six months Glendale will be evaluating the area and the City Council may adopt a policy as to how the area should be serviced.

Mr. Jensen asked for clarification on who will operate and maintain the sewer collection system for the Cortessa and White Tank Foothills developments. Mr. Reedy replied that the City of Surprise will own, operate, and maintain the sewer collection system.

Mr. Williams moved to authorize a public hearing on the Draft MAG 208 Plan Amendment for the City of Glendale Temporary Sewer Service Agreement and Future Water Reclamation Plant Correction. Mr. Jensen seconded the motion. Mr. Bodiya moved to amend the motion to indicate that authorization is contingent upon the City of Surprise owning and operating the sewer collection system associated with the Cortessa and White Tank Foothills developments. Mr. Williams stated that he concurred with the amended motion. Through a roll call vote, the amended motion was unanimously passed to authorize a public hearing on the draft amendment contingent upon the City of Surprise owning and operating the sewer collection system associated with the Cortessa and White Tank Foothills developments.

9. Update on the Agua Fria Linear Reclaimed Water Recharge Project

Frank Turek, PBS & J, provided an update on the Agua Fria Recharge Project. Mr. Turek indicated that the project is sponsored by the Multi-City Subregional Operating Group and the Bureau of Reclamation. The objective is to use 60,000 acre-feet of reclaimed water per year from the 91<sup>st</sup> Avenue Wastewater Treatment Plant during the off-peak winter season for recharge, recreation, habitat enhancement and industrial, commercial or agricultural reuse.

Mr. Turek indicated that the study area generally runs along the Agua Fria River from north of Interstate-10 to the Bell Road area. Phase 1 of the project has been completed, including stakeholder coordination, a consensus plan, and public information. A project information web site and many newsletters were developed. The project sponsors met with fifty groups and established a steering committee and five technical committees. Information from Phase 1 will be used for Phase 2 which consists of developing alternatives, conceptual design, an Environmental Impact Statement and a feasibility report. Preliminary designs are anticipated between 2006 and 2008, during Phase 3. It is anticipated that Phase 4 will bring the final designs and implementation in 2009 or 2010.

Mr. Turek indicated that alternative development tasks will define the available reclaimed water, develop design considerations, research area conditions, utilities and master plans, and develop initial locations for diversion and pipeline alignment. The potential diversion points,

pipeline alignments, channelization, and recharge facility and concepts were illustrated. The sponsors met with the Arizona Department of Water Resources. Data from existing studies will be used and new data was used for modeling water resource aspects. The Environmental Impact Statement, and scoping plans were discussed. Groundwater modeling will be conducted for scenarios with the project and without the project. Public involvement opportunities will continue.

Mr. Williams indicated that the City of Surprise went on record during Phase I with concerns regarding the project between Peoria and Bell Roads, near the planned Special Planning Area 3 Plant. He indicated that the Cities of Surprise and El Mirage may need to recharge to the Agua Fria River and inquired how their interests would be protected.

Mr. Turek indicated that the project would incorporate all other recharge projects and care would be taken to avoid waterlogging the area. He indicated that the project sponsors met with planning groups, including representatives of the City of El Mirage, and that El Mirage is aware that this project would have the capacity to accept their flows.

Mr. Williams indicated that Surprise and El Mirage met with Lance Decker regarding the Agua Fria Recharge Project, although discussion of how all parties can use the Agua Fria River has not been conducted.

Aimee' Conroy, City of Phoenix, indicated that the project sponsors are willing to meet with Surprise and El Mirage to discuss working together. She indicated that Phoenix has the understanding that El Mirage may be interested in partnering and inquired whether Surprise is interested in partnering or in the Agua Fria Recharge Project not conducting recharge.

Mr. Williams indicated that the City of Surprise is concerned that the City of Phoenix recharge may prevent recharge by Surprise, and partnering may be a potential mechanism for consideration.

Ms. Conroy indicated that the Agua Fria Recharge Project can include the City of Surprise recharge plans in the modeling, and now is the time to have such discussions with communities in the study area. She indicated that the project sponsors would be happy to meet with Surprise and El Mirage.

Mr. Williams indicated that today was the first he had heard of the possibility of the project running north of Bell Road.

Ms. Conroy indicated that, although Sun City suggested that the project run north of Bell Road, there are no plans to run north of Bell at this time.

Ted Curtis, member of the public, inquired whether Tamarisk would occur in the Agua Fria River as a result of the recharge project.

Ms. Conroy indicated that there is no Tamarisk in the Agua Fria River, and they will evaluate managing the water in a way that is not good for Tamarisk growth. She indicated that the City of Phoenix is evaluating ways to eliminate Tamarisk in the Tres Rios area.

Mr. Curtis inquired whether the project sponsors were interested in economic opportunities related to the vegetation in the project.

Ms. Conroy indicated that more information regarding his comment would be needed to answer.

Mr. Bodiya indicated that Maricopa County had been involved in the project since the onset and inquired how the project would address vector control. He indicated that the County spent a lot of funds on mosquito control this year.

Ms. Conroy indicated that they are evaluating vector control measures applied in the Tres Rios area and appropriate measures would be applied at the Agua Fria site. She indicated that the project goal is to not become a mosquito breeding ground, and that this was a high mosquito year.

Chair Klingler indicated that it is anticipated that a public hearing would be conducted on the draft 208 plan amendments on January 19, 2005, and called for adjournment of the meeting.