

November 1, 2010

TO: Members of the MAG Water Quality Advisory Committee

FROM: David McNeil, City of Tempe, Chair

SUBJECT: MEETING NOTICE AND TRANSMITTAL OF TENTATIVE AGENDA

Monday, November 8, 2010 - 9:30 a.m.  
MAG Office, Suite 200 - Saguaro Room  
302 North 1<sup>st</sup> Avenue, Phoenix

A meeting of the MAG Water Quality Advisory Committee has been scheduled for the time and place noted above. Members of the Water Quality Advisory Committee may attend the meeting either in person, by videoconference or by telephone conference call. Those attending by videoconference must notify the MAG site three business days prior to the meeting. If you have any questions regarding the meeting, please contact Chair McNeil or Julie Hoffman at 602-254-6300.

Please park in the garage underneath the building, bring your ticket, and parking will be validated. For those using transit, Valley Metro/Regional Public Transportation Authority will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

In 1996, the Regional Council approved a simple majority quorum for all MAG advisory committees. If the MAG Water Quality Advisory Committee does not meet the quorum requirement, members who arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged. If you are unable to attend the meeting, please make arrangements for a proxy from your entity to represent you.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Jason Stephens at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

## TENTATIVE AGENDA

### COMMITTEE ACTION REQUESTED

1. Call to Order

2. Agenda Announcements

3. Call to the Audience

An opportunity will be provided to 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 on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Water Quality Advisory Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

4. Approval of the June 1, 2010 Meeting Minutes

5. Chair and Vice Chair Appointments

On July 22, 2009, the MAG Regional Council approved the MAG Committee Operating Policies and Procedures. Officer positions for technical committees have one-year terms, with possible reappointment to serve up to one additional term, by consent of the respective committee. According to these policies and procedures, the chair and vice chair appointments of the MAG Water Quality Advisory Committee are due to expire on December 31, 2010.

Technical committees may choose to do one of the following: 1) recommend reappointment of the current chair and vice

2. For information.

3. For information.

4. Review and approve the June 1, 2010 meeting minutes.

5. For information, discussion, and possible action to: 1) recommend reappointment of the current chair and vice chair to serve a second one-year term, or 2) have the vice chair ascend to the chair position and have a new vice chair appointed by the Regional Council Executive Committee.

chair to serve a second one-year term, or 2) have the vice chair ascend to the chair position and have a new vice chair appointed by the Regional Council Executive Committee. Officer reappointments will require action by the Water Quality Advisory Committee at its November meeting. Committees that choose to have the Executive Committee appoint a new vice chair will require letters of interest from MAG member agencies. The letters are requested to be submitted by Monday, November 8, 2010 to Mayor Thomas Schoaf, MAG Chair. The appointments will be made at the November 15, 2010 Executive Committee meeting. Please refer to the enclosed material.

6. Update to the MAG 208 Water Quality Management Plan

The MAG FY 2011 Unified Planning Work Program includes a project to update the MAG 208 Water Quality Management Plan. The update would incorporate 208 Plan Amendments and Small Plant Review and Approvals that have been approved by the MAG Regional Council and Arizona Department of Environmental Quality into the MAG 208 Plan document. The MAG 208 Plan was last updated October 2002. At its June 1, 2010 meeting, the MAG Water Quality Advisory Committee expressed interest in updating additional aspects of the MAG 208 Plan. An opportunity will be provided for the Committee to discuss the MAG 208 Plan and a potential roadmap for an update.

7. Green Projects and Programs for Water and Wastewater Infrastructure

On January 12, 2010, MAG, in cooperation with the Arizona Department of Environmental Quality and U.S. Environmental Protection Agency Region IX, conducted a workshop on greening water and wastewater infrastructure focusing on Arizona issues.

6. For information and discussion.

7. For information and discussion.

Following the workshop, a roadmap for greening water infrastructure was prepared to assist utilities with assessing options for reducing energy consumption and chemical use, conserving water, and saving critical financial resources. Committee members will be invited to share green projects and programs for water and wastewater infrastructure that are occurring within their jurisdictions.

8. Legislative and Regulatory Update on Water Quality Related Items

An opportunity will be provided for the Committee to discuss recent water quality related legislative and regulatory activities.

9. Call for Future Agenda Items

The Chairman will invite the Committee members to suggest future agenda items.

8. For information and discussion.

9. For information and discussion.

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

Tuesday, June 1, 2010  
MAG Office Building  
Phoenix, Arizona

MEMBERS ATTENDING

|   |   |
|---|---|
| David McNeil, Tempe, Chair                    | Rich Williams Sr., Surprise                                   |
| David Iwanski, Goodyear, Vice Chair           | Suzanne Grendahl, Scottsdale                                  |
| * Marilyn DeRosa, Avondale                    | Kevin Chadwick, Maricopa County                               |
| * Buckeye                                     | * John Boyer, Pinnacle West Capital                           |
| Lori McCallum for Jacqueline Strong, Chandler | Jim Kudlinski for Ray Hedrick, Salt River<br>Project          |
| * Dave Emon, El Mirage                        | Summer Waters, University of Arizona<br>Cooperative Extension |
| Karen Young for Lonnie Frost, Gilbert         | # Michael Byrd, Salt River Pima-Maricopa<br>Indian Community  |
| * Glendale                                    | Carole Klopatek, Fort McDowell Yavapai<br>Nation              |
| Kathryn Sorenson, Mesa                        | * Glenn Stark, Gila River Indian Community                    |
| * Brian Biesemeyer, Peoria                    |   |
| Susan Kinkade for Randy Gottler, Phoenix      |   |
| Greg Homol, Queen Creek                       |   |

\*Those members neither present nor represented by proxy.  
#Attended by telephone conference call.

OTHERS PRESENT

|   |  |
|---|--|
| Julie Hoffman, Maricopa Association of<br>Governments     | Edwina Vogan, Arizona Department of<br>Environmental Quality |
| Patrisia Magallon, Maricopa Association of<br>Governments | Chuck Graf, Arizona Department of<br>Environmental Quality   |
| Jesse Gonzales, City of Peoria                            |  |

1. Call to Order

A meeting of the MAG Water Quality Advisory Committee was conducted on Tuesday, June 1, 2010. David McNeil, City of Tempe, Chair, called the meeting to order at approximately 2:30 p.m. Michael Byrd, Salt River Pima-Maricopa Indian Community, attended the meeting via telephone conference call.

2. Agenda Announcements

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

3. Call to the Audience

Chair McNeil provided an opportunity for members of the public to address the 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. No members of the public indicated that they wished to address the Committee.

4. Approval of the June 23, 2008 Meeting Minutes

The Committee reviewed the minutes from the June 23, 2008 meeting. Rich Williams, City of Surprise, moved and Kevin Chadwick, Maricopa County, seconded, and the motion to approve the June 23, 2008 meeting minutes carried unanimously.

5. Role of the MAG Water Quality Advisory Committee

Julie Hoffman, MAG, discussed the role of the MAG Water Quality Advisory Committee. She stated that MAG is the designated Regional Water Quality Management Planning Agency for Maricopa County. In this capacity, MAG develops the MAG 208 Water Quality Management Plan, which describes the desired wastewater treatment configuration for the region. She indicated that the Committee maintains the 208 Plan by reviewing 208 Plan Amendments and Small Plant Review and Approvals.

Ms. Hoffman mentioned that the Small Plant Review and Approval Process is used for facilities that would have a capacity of 2.0 million gallons per day (mgd) or less with no Arizona Pollutant Discharge Elimination System (AZPDES) discharge. She indicated that the 208 Plan Amendment Process is used for facilities with a capacity greater than 2.0 mgd and/or that would have an AZPDES discharge. Ms. Hoffman stated that the Committee reviews the 208 Plan Amendments and Small Plant Review and Approvals and makes a recommendation. She added that the Committee serves in an advisory capacity to the MAG Management Committee and MAG Regional Council. Ms. Hoffman noted that the Regional Council is the decision-making body of MAG. She mentioned that a copy of the MAG committee structure has been included in the agenda packet. Ms. Hoffman added that an overview of the Committee's role is being provided since the Committee has not met for two years and there are several new members.

Chair McNeil stated that the 208 Water Quality Management Plan is based on Section 208 of the Clean Water Act and is a regional planning approach to wastewater treatment. He added that MAG has been designated to prepare the 208 Water Quality Management Plan for Maricopa County.

6. Information Requested on Existing or Imminent Sustainability Efforts for Possible Sustainable Communities Planning Grant Program Application

Amy St. Peter, MAG, provided an overview of the information requested on existing or imminent sustainability efforts for possible Sustainable Communities Planning Grant Program application. She stated that the U.S. Department of Housing and Urban Development (HUD) is partnering with the U.S. Department of Transportation (DOT) and the Environmental Protection Agency (EPA) to offer the Program. She mentioned that the funding supports the creation of regional plans for sustainable development. Ms. St. Peter noted that MAG may be eligible to apply for the funding. She indicated that acquiring funds now may position MAG well in the future if such plans become a requirement with the re-authorization of federal transportation funding.

Ms. St. Peter stated that an approximate \$100 million is available nationally. Large metropolitan areas could receive up to \$5 million and small rural areas may receive up to \$2 million. She added that a 20 percent match is required. Ms. St. Peter noted that it is anticipated that this grant process will be extremely competitive and oversubscribed. She mentioned that many in the region have already expressed interest in applying for the grant. Ms. St. Peter commented that the advance notice published by HUD in March did not define an eligible applicant or region. It is hoped that the Notice of Funding Availability (NOFA) to be released in June will help identify the eligible candidates for this funding. She added that MAG is working to determine the most appropriate applicant for the region. She indicated that possibilities may include: the cities applying on their own; applying as a region through MAG; or submitting an application as a consolidated effort through the Sun Corridor, which would include Maricopa County, Pima County and Pinal County.

Ms. St. Peter indicated that the information on the grant was presented to the MAG Regional Council in May. She commented that the MAG Regional Council requested that MAG staff analyze and confirm interest in moving forward with a consolidated application on behalf of the Sun Corridor. Ms. St. Peter indicated that MAG staff is currently in the process of surveying all the MAG member agencies to ascertain MAG's most appropriate role. She mentioned that MAG would like to support the cities in whatever format that takes.

Ms. St. Peter stated that in April, the MAG Regional Council Executive Committee suggested that MAG staff convene meetings with community partners, member agencies, and the officers of the MAG technical Committees. Ms. St. Peter indicated that more than 20 different agencies have expressed interest in supporting an application on behalf of the region or the Sun Corridor. She commented that MAG staff is currently in discussions with the various agencies to determine the activities that are relevant to the grant. Ms. St. Peter commented that the focus is on the impacts that this activity could have on the region. She indicated that one topic being discussed is the development of green housing and jobs along high capacity transit lines such as commuter rail, light rail, and the proposed intercity rail between Phoenix to Tucson. Ms. St. Peter commented on developing more smartly around those corridors and provide better access to affordable housing and more transportation options thereby increasing the quality of life and not hurting the environment.

Ms. St. Peter stated that MAG staff has also heard in stakeholder meetings that the grant should focus on the entire Maricopa County region and not just one side or the other. In addition, MAG staff is hearing it is important to consider the infill development. She mentioned that it has also been expressed that the specific impacts need to be provided. Ms. St. Peter added that the people need to know what is included in the grant in order to know if they are supporting the application. She discussed supporting existing efforts and the many sustainable projects in the region.

Ms. St. Peter discussed the planning inventory chart and requested feedback on any activities that the Committee may be addressing or may want to address in the future that may help support this planning process. She indicated that HUD has also advised that they are focused on partnerships. Ms. St. Peter stated that part of the reason MAG is collecting information is to present a holistic portrait of the activity in the region and be able to move forward as a region in partnership on this grant. She noted that the Central Arizona Association of Governments (CAAG) has taken action to support a consolidated application with MAG. Ms. St. Peter added that the Pima Association of Governments (PAG) is also considering the possibility of partnering with MAG and CAAG. She discussed PAG's efforts in the Imagine Greater Tucson project. Ms. St. Peter indicated that PAG is currently analyzing the best strategy for moving forward with this grant. She stated that the next steps include reviewing the planning inventories and receiving feedback.

David Iwanski, City of Goodyear, inquired if the 20 percent match is in-kind or cash. Ms. St. Peter responded that it appears HUD is allowing for in-kind. She added that the advance notice indicated that the 20 percent would be a soft match. Ms. St. Peter noted that the advance notice received a lot of comments. She commented that HUD has indicated that the release of the NOFA, which was originally scheduled to be released in May, will now be released in mid-June. Ms. St. Peter added that the hope is the NOFA would provide more clarity.

Carole Klopatek, Fort McDowell Yavapai Nation, inquired about water being identified as a focus area by those evaluating a possible application. Ms. St. Peter responded that MAG has not received information at that level of detail. She added that MAG is requesting feedback or guidance in terms of how to address water. Ms. St. Peter indicated that water has been previously mentioned as a critical topic. She commented that MAG is currently in the process of collecting detailed information to potentially assist with the water issues. Dr. Klopatek inquired about Southern Arizona. Ms. St. Peter responded that PAG is looking at the grant to support their planning efforts. She indicated that the purpose of the grant is to support the creation of regional plans for sustainable development. Ms. St. Peter noted that she is not aware if PAG has yet identified the issues that are going to be impacted by the plan. She added that MAG is looking ahead at the impacts whereas PAG is currently looking at the planning part of the project.

Chair McNeil stated that as water stewards, the cities are constantly developing programs related to reclaimed water use and energy consumption in the water field. He noted that it is difficult to conceptualize how a sustainability plan from a water perspective would fit into the HUD categories like transportation choices, affordable housing, economic competitiveness, and value communities and neighborhoods. Chair McNeil discussed the need for resources to conduct water sustainability planning in the region. He indicated that he was having trouble fitting water sustainability into the categories identified in the grant. Ms. St. Peter responded that MAG is open to feedback in any format that it may come. She added that the planning inventory has been offered as an initial framework. Ms. St. Peter provided her contact information for those who would like to submit ideas for this grant. She noted that once the grant is released, applicants may have as little as 60 days to complete and submit the information to HUD. Ms. St. Peter encouraged the Committee to provide information as soon as possible so MAG could move quickly once the NOFA is released.

Dr. Klopatek inquired if the grant would include the entire Active Management Area. Ms. St. Peter responded that an application for the Sun Corridor could potentially include Maricopa County, Pinal County, and Pima County. Chair McNeil inquired if MAG is requesting that the information be submitted as a Committee or by individual communities. Ms. St. Peter responded that information has already been received by both committees and cities. She added that the information could be submitted using the planning inventory or any other format.

Kathryn Sorenson, City of Mesa, discussed recharge and recovery. She added that in the Active Management Areas, utilities can recharge anywhere and pull the water out at 100 miles away. Ms. Sorenson noted that this is the same for the Sun Corridor since it falls within Active Management Areas. She indicated that there is no greater plan for how this could be done more wisely. Ms. Sorenson stated that regarding work related to the Committee, the City of Mesa is taking a look at ways to better eliminate septic from its service area, particularly in disadvantaged communities. She mentioned that while the whole region is striving to eliminate septic, Mesa is redoubling its efforts.

Chair McNeil stated that the intent is to identify sustainability efforts already occurring in the region even if they do not fit within the confine of this Committee. He added that the role of the Water Quality Advisory Committee is 208 planning; however, as member agencies, this is a good venue

to solicit information. Chair McNeil indicated that anything within the purview of water and wastewater may be appropriate.

Chair McNeil referred to Ms. Sorenson's comments on recharge and recovery. He mentioned that the core sustainability issues in the water and wastewater industry include recharge and recovery, reclaimed water use, and energy issues. Ms. St. Peter responded that when HUD defined sustainable development, they included the environment, economy and social equity. Chair McNeil added that given the short time frame, submitting information to Ms. St. Peter individually may be the most appropriate. Ms. St. Peter encouraged the Committee to contact her with any ideas, questions or concerns early in the process so they could be addressed.

Chair McNeil inquired if there are any municipalities among the 20 organizations that have expressed interest in the grant. Ms. St. Peter responded that agencies that have expressed interest in the grant include: municipalities, Arizona State University, Local Initiatives Support Corporation, Urban Land Institute, Sonoran Institute, Native American Connections, etcetera. She noted that the Arizona Municipal Water Users Association has been invited to meetings; however, they have not attended to date. Ms. St. Peter added that MAG is working to potentially submit an application that gives a reflection of the priorities for the entire region.

#### 7. The Governor's Blue Ribbon Panel on Water Sustainability

Chuck Graf, Arizona Department of Environmental Quality (ADEQ), provided a presentation on the Governor's Blue Ribbon Panel on Water Sustainability. He stated that the presentation will include discussion on the Blue Ribbon Panel formation and purpose, the goals, working groups that have been formed, the schedule and products, and some early ideas of the Panel. Mr. Graf mentioned that the Governor announced the formation of the Panel on August 28, 2009. He indicated that the Panel is co-chaired by Ben Grumbles, Director of the Arizona Department of Environmental Quality; Herb Guenther, Director of the Arizona Department of Water Resources (ADWR); and Kris Mayes, Commissioner for the Arizona Corporation Commission. Mr. Graf noted that the co-chairs rotate as chair for each of the meetings. He indicated that the purpose of the Blue Ribbon Panel is to advance statewide sustainability of water by increasing the reuse, recycling and conservation of water to support continued economic development in the State of Arizona while protecting Arizona's water supplies and natural environment. Mr. Graf noted that this purpose statement has been evolving with each meeting.

Mr. Graf stated that the Blue Ribbon Panel is composed of 40 appointed panelists representing a variety of different stakeholder groups such as the Arizona Legislature, municipalities, federal government, tribes, universities, private utilities, and industry and environmental associations and organizations. He added that the Panel has developed five goals which include: 1) Increase the volume of reclaimed water reused for beneficial purposes in place of raw or potable water; 2) Advance water conservation, increase the efficiency of water use by existing users, and increase the use of recycled water for beneficial purposes in place of raw or potable water; 3) Reduce the amount of energy needed to produce, deliver, treat, reclaim and recycle water by the municipal, industrial, and agricultural sectors; 4) Reduce the amount of water required to produce and provide energy by Arizona power generators; and 5) Increase public awareness and acceptance of reclaimed and recycled water uses and the need to work toward water sustainability.

Mr. Graf discussed the five working groups that have been formed under the Blue Ribbon Panel. He indicated that the Public Perception/Acceptance Working Group is chaired by Kathleen Chavez, Pima County Regional Wastewater Reclamation. The Regulations and Permitting Working Group

is chaired by Ron Doba, Arizona WaterReuse Association. Guy Carpenter, National WaterReuse Association, is chair of the Infrastructure/Retrofit Working Group. Mr. Graf noted that he is most familiar with the Infrastructure/Retrofit Working Group since he assists Mr. Carpenter with staffing the group. Steve Olson, Arizona Municipal Water Users Association, chairs the Conservation/Recycling/Efficiency/Energy Nexus Working Group, which has more than 100 interested parties. The Economic/Funding Working Group is chaired by David Snider, Pinal County Board of Supervisors.

Mr. Graf discussed the Blue Ribbon Panel schedule and products. He mentioned that the first meetings were devoted to organization and education. Mr. Graf stated that currently the working groups are in the issue identification phase. He indicated that the concept development phase will end in July 2010 with an interim report due to the Panel at their July meeting. Mr. Graf commented that the working groups are currently developing the interim reports which will show the emerging areas of focus, priorities, and some potential solutions. He added that although it may be too early to identify potential solutions, the working groups may be able to identify areas where solutions are needed. Mr. Graf indicated that once the report is released, the working groups will begin working on resolution development to be completed by November 2010. He added that this phase will include developing a detailed resolution of priority issues with recommendations for legislation, rules, and policy as appropriate. Mr. Graf noted that the final report will be issued by the Panel in November 2010.

Mr. Graf stated that it is too early to have any fully formed recommendations from the Blue Ribbon Panel or working groups; however, the working groups were asked to identify emerging areas of focus. Mr. Graf provided an overview on some of the emerging areas of focus from each working group. He referred to the ideas from the Public Perception/Acceptance Working Group. He indicated that the University of Arizona conducted a public perception survey and the group feels there is a need for a more detailed survey. Mr. Graf commented that perception across the state varies widely and there is also a need to settle on acceptable terms and definitions. He mentioned the need to expand educational initiatives that already exist such as Project Wet. One question asked by the group is how to gain support for sustainability measures when, even in a drought, it is "business as usual" in Arizona. Mr. Graf stated that the Public Perception/Acceptance Working Group inquired about having media professionals brought in to assist with developing and publicizing messages on water sustainability.

Mr. Graf discussed the emerging areas of focus from the Regulations/Permitting Working Group. He noted that there are approximately 20 emerging issues and five are listed in his presentation. Mr. Graf indicated that the areas of focus for this working group include: simplified and consistent standards/monitoring requirements; stormwater harvesting and gray water mechanisms that encourage expanded use where appropriate; Waters of the United States, urban lakes, AZPDES permits, and reclaimed water permitting; Arizona Department of Water Resources policies that inhibit certain reclaimed water uses; and having a percentage of conserved water be dedicated to the environment.

Mr. Graf discussed the emerging areas of focus for the Infrastructure/Retrofit Working Group. He indicated that there are technical standards being developed; however, there is a need for consistency statewide. Mr. Graf noted that the current ADEQ rule includes almost no detail on those technical standards. Additional areas of focus include: a certification program for reclaimed water distribution system operators; criteria for aquifer recharge and recovery for indirect potable use; criteria and

administrative approach that allows for augmentation of reclaimed water with other recycled water; and single, concurrent, water quality study of reclaimed versus CAP versus canal water. Mr. Graf noted the different studies that have been completed on water quality; however, the Infrastructure/Retrofit Working Group feels that all of those studies need to be combined into one study.

Mr. Graf referred to the efforts by the Conservation/Recycling/Energy Working Group. He stated that there are different concerns among the communities on these topics. In particular, the high country communities and the Phoenix/Tucson metropolitan areas take different approaches to water sustainability. Mr. Graf indicated that the working group will most likely emphasize conservation opportunities first more than supply augmentation and use of surface and groundwater supply. He commented on the need for incentives on hybrid and dry cooling technologies which would ultimately reduce the demand for water. Mr. Graf noted that the agricultural sector felt that there needs to be good analyses of cost savings for different types of technologies that could be implemented.

Mr. Graf mentioned the emerging areas of focus for the Economic/Funding Working Group which include developing a matrix of available funding sources versus project types and developing simplified cost modeling to show viability breakpoints. He discussed customer connections needed to viably serve A+ water and local gray water use versus a system-wide provision of reclaimed water.

Mr. Graf indicated that there are a number of issues that have been discussed at two or more of the working groups. He stated that everyone wants subsidies and monetary incentives. He mentioned that the Water Infrastructure Finance Authority has conducted rate studies for drinking water and wastewater; however, potentially a similar study could be done for reclaimed water use. Mr. Graf noted that taking a look at the methodologies used to set the rates would also be beneficial. He indicated that the amount of reclaimed water being used is difficult data to obtain. Standardized reclaimed water reporting requirements are needed. Mr. Graf discussed the development of an agenda for further research and studies. He mentioned the development of a standard, consensus list of constituents and test protocols for pharmaceuticals and personal care products (PPCPs) for use throughout Arizona. Mr. Graf stated that strategy options are needed for reclaimed water PPCPs for the contaminants of emerging concerns. He added that numerical standards should not be expected for years to come; however, these may be a major inhibitor for public acceptance of the reused and reclaimed water. Mr. Graf noted that there is also a need for resolving jurisdictional/duplication issues between ADEQ and other entities.

Mr. Graf stated that there is a feeling among the working groups for a more detailed life-cycle analysis and triple bottom line analysis of water sustainability approaches at the strategic level. He added that some of the issues being discussed include: centralized versus decentralized infrastructure; reclaimed versus stormwater utilization versus residential gray water; and regional salt management options. Mr. Graf commented that the question that keeps arising is “why should I conserve water?” He mentioned that an average citizen might say that conserved water only goes to support more development and reduce my quality of life. Mr. Graf commented that the water provider would say it cuts my own throat by reducing my revenue. He added that the working groups continue to meet. The next Blue Ribbon Panel meeting will be held Friday, July 9, 2010 at ADWR.

Mr. Iwanski commented on the amount of work involved. Mr. Graf stated that a lot of personal hours have been spent by those participating on the Blue Ribbon Panel and working groups. He mentioned the number of ideas being discussed and that the challenge will be to hone those to a manageable level.

Chair McNeil stated that he participated in the Conservation/Recycling/Efficiency/Energy Nexus Working Group, but has been unable to make the subsequent meetings. He referred to the third goal in Mr. Graf's presentation, "Reduce the amount of energy needed to produce, deliver, treat, reclaim and recycle water by the municipal, industrial, and agricultural sectors." Chair McNeil mentioned discussions by the working group on the water demands of energy generation; however, he has not seen anything regarding the energy requirements of water delivery and treatment. He added that there does not appear to be much momentum related to this goal. Mr. Graf replied that would also be his assessment. Based on discussions with others who have attended the Conservation/Recycling/Efficiency/Energy Nexus Working Group, there has been difficulty since the subject is so broad. Mr. Graf added that the water/energy nexus has been particularly challenging. He encouraged those with expertise in this area to participate in the working group.

Chair McNeil stated that utilities are very aware of the energy and associated costs for their operations. He added that those costs and the energy demand need to be considered when crafting regulatory constructs for wastewater and drinking water. Chair McNeil commented that potentially a stronger voice is needed. He stated that it may be getting lost between the Regulations and Permitting Working Group and the Conservation/Recycling/Efficiency/Energy Nexus Working Group. Mr. Graf stated that the intention was for these types of issues be addressed in the Conservation/Recycling/Efficiency/Energy Nexus Working Group. He noted that this working group has a lot of people with experience in the more traditional water conservation arena. He stated that they could make continued strides on the water/energy nexus.

Ms. Sorensen stated that the City of Mesa has some concerns regarding the discussion on gray water. She indicated that Mesa is a community that has federal contracts for reclaimed water. Ms. Sorensen added that Mesa feels the water is already being used in a very sustainable and innovative fashion. She mentioned that gray water may be an appropriate solution in areas like Tucson where they do not have control over their own reclaimed water; however, the City of Mesa is very concerned about what may come from this effort and how it may interfere with their federal contracts. Mr. Graf responded that the Regulations and Permitting Working Group has prepared a draft interim report. He added that this issue was represented taking into account the views being stated. He added that the ultimate solution will have to recognize this issue since many communities have the same view as the City of Mesa.

Dr. Klopatek stated that in the March meeting, Steve Olson, Executive Director for the Arizona Municipal Water Users Association, stated that municipalities are extremely concerned. She added that all of those concerns are on the table and the other working groups are very much aware. Dr. Klopatek stated that the issue is being addressed in several different ways.

Chair McNeil requested clarification on the federal contracts. Ms. Sorensen replied that the City of Mesa and the City of Chandler have federal contracts under the Gila River Indian Community settlement. The reclaimed water is exchanged for CAP water. Chair McNeil commented that the five Sub-Regional Operating Group (SROG) cities have contractual obligations to deliver reclaimed water to the Palo Verde Nuclear Generating Station. He noted that the contracts were just

renegotiated. Chair McNeil stated that cities have seen a dramatic decrease in wastewater flows in the past several years due to conservation and other measures. With regard to the gray water concern, if people start recycling water at the source, then flows will continue to decrease. Chair McNeil commented on flows reaching a point where cities are unable to meet their contractual obligations. He stated that sending reclaimed water to the Palo Verde Nuclear Generating Station is a very good, sustainable, way to reuse water. Chair McNeil mentioned that the region has approached the point of having too much flow in the regional sewer system and now it is almost to the point where there is not enough flow to satisfy the obligations. He indicated that strongly promoting gray water use may be counter-productive.

Mr. Graf commented that is the genesis of the recommendation to conduct a life-cycle analysis of the reclaimed water versus gray water issue. He indicated that he is not aware of any detailed work done on the offsets of water conservation, energy, materials, carbon footprint, etcetera. Mr. Graf stated that there is a possibility of a presentation at the July meeting on an Arizona entity and the practical challenges of implementing a water conservation program including gray water. Chair McNeil indicated that there will not likely be universal recommendations that would be applicable across all geographic regions. He stated that the emphasis on gray water may be good in rural areas, but not urban regions. Chair McNeil added that he hopes those types of distinctions come from the Blue Ribbon Panel.

Suzanne Grendahl, City of Scottsdale, stated that the discussion has been to keep gray water regulations out of the Active Management Areas due to these issues and to try it in rural areas. She added that the discussion was on encouraging gray water use in rural communities and outlying areas.

Dr. Klopatek inquired if Mr. Graf was familiar with H.B. 2617 which looks at the duplication between ADEQ and ADWR. She stated that there already is implementation within law to jurisdictionally not duplicate efforts. Mr. Graft indicated that he is not familiar with H.B. 2617. He added that there are a number of working groups addressing the duplication issue.

Ms. Sorensen commented on discussion by the MAG Standard Specifications and Details Committee regarding the possibility of state law that would take jurisdiction away from MAG and place it with the state. Chair McNeil stated that Jesse Gonzales, City of Peoria, Chair of MAG Standard Specifications and Details Committee, will provide an overview of discussions regarding the potential establishment of state regulations for infrastructure specifications.

Mr. Gonzales stated that the Standard Specifications and Details Committee deals with materials, the amount of various aggregates and oil, asphalt, the making of concrete, pipe, etcetera, as well as the placement of construction materials. He stated that the Committee writes specifications and details for the pipe that conducts reclaimed water. Mr. Gonzales indicated that the Committee does not get involved with the production of the product. He mentioned that the City of Phoenix, City of Chandler, and others have good specifications that are supplemental to MAG that serve as guidance for local agencies that may not have the wherewithal to generate their own specifications and details.

Mr. Gonzales stated that involvement with the Blue Ribbon Panel occurred when he was faced with a retrofit situation. He indicated that a school wanted to convert an existing irrigation system, which is currently fed by a municipal potable water system, into a reclaimed water system. He added that

there are currently no local standards to address this request from the customer side of the meter. Mr. Gonzales mentioned that the Committee describes this as the gray area. It is the area outside of the right-of-way but also outside the five-foot area where the building officials get involved. Since there were no guidelines, he has researched guidelines across the country. Mr. Gonzales indicated that he found good work by the City of Tucson, which was modeled after work in Texas and Florida.

Mr. Gonzales stated that he posed a lot of questions to the Arizona Department of Environmental Quality and they invited him to the Blue Ribbon Panel Infrastructure/Retrofit Working Group meetings. He mentioned that one of the items he and other members of the Standard Specifications and Details Committee noticed was thoughts about having local control of the distribution system elevated to Title 18. This would be taking control from the local level and putting it at the state level for consistency. Mr. Gonzales stated that there has been a lot of discussion on the issue. He added that he has personally had discussions with Mr. Graf. Mr. Gonzales indicated that they have come to an agreement that they realize there needs to be some framework at the state level to allow the counties to function in this arena, but still leave the local agencies with the authority to design, construct and manage their own systems. He asked Mr. Graf if that was his understanding. Mr. Graf replied yes.

Mr. Gonzales stated that he agreed to throw his efforts and the efforts of the Committee behind the activity of developing a state framework; however, still keeping the ability for each agency to develop their own standards and specifications that are necessary for the operation of that agency's system. He added that MAG would be the baseline guidance document for specifications and details for agencies that do not have the wherewithal to generate work that has already been conducted.

Ms. Sorensen commented that she liked the idea and inquired about the structure of the framework. Mr. Gonzales replied that there are many opinions. He indicated that he has been working closely with a representative from the Maricopa County Health Department that has been attending the working group meetings and reclaimed water specialists. Mr. Gonzales stated that he was hoping for more time to converse with Mr. Graf and Guy Carpenter, Chair of the Infrastructure/Retrofit Working Group, on the details. He mentioned that local agency control over their systems is his focus. Mr. Gonzales indicated that a Maricopa County Health Department representative was recently added to the Committee. Each representative on the Committee has the ability to bring a case forward for any existing specification that has deficiencies. A workgroup is formed to review the change and if it benefits the group in whole, the Committee will vote to pass it and include it in the MAG Specs and Details book. If there is a detail that does not exist, one can be created and included in the book.

Mr. Gonzales stated that he has been working on the on-site customer side reclaimed water system and there is not direction locally. He noted that it was a focus of the Infrastructure/Retrofit Working Group; however, he wanted to include this in the MAG document. Mr. Gonzales stated that this effort has kicked off and there is a lot of support from various MAG member agencies and ASU Schools of Engineering and Sustainability. The hope is to address items in the gray area.

Chair McNeil inquired if Mr. Gonzales feels there is an opportunity to establish a state-wide regulatory framework that can facilitate reclaimed water reuse. He indicated that the goal of the Blue Ribbon Panel is to encourage reuse. Chair McNeil stated that he believes the discussions are based on the premise that broad criteria through regulation can serve to promote reuse. Mr. Gonzales responded that if good local standards are developed through MAG and/or its member agencies, we

have gone a long way toward encouraging the use of reclaimed water. He referred to a recent conversation with a water quality individual about using reclaimed water in the manufacturing of concrete. Mr. Gonzales clarified that most specifications call for the use of potable water. He noted that there are ASTM Standards and AASHTO Standards that have been established for the use of water in the manufacturing of concrete. Mr. Gonzales indicated that if A+ reclaimed water meets those standards, then there is no reason why it could not be used. He mentioned that steps have been taken to look into it. Mr. Gonzales noted that if it is a viable use, they will get the word out and alter the specifications to reflect the use of a municipal potable source with no additional testing or an alternate source of water subject to ASTM and AASHTO testing. He added that this could open the door for a lot of reclaimed water use.

Chair McNeil asked if Mr. Gonzales was concerned about the direction of the Blue Ribbon Panel and possible regulatory standards. Mr. Gonzales indicated that he does not believe the Panel would turn away from things MAG could do that would open a door for use of reclaimed water. He commented that while conducting research for the Blue Ribbon Panel he looked into this idea and found some promise in the area. Mr. Gonzales reiterated that whatever is done at the state level needs to be a framework that does not restrict the local agency's ability to write specifications and details and manage their own reclaimed water systems.

#### 8. Roadmap for Greening Water Infrastructure

Ms. Hoffman provided a presentation on the Roadmap for Greening Water Infrastructure. She stated that MAG has been working on this project in cooperation with Arizona Department of Environmental Quality and the U.S. Environmental Protection Agency, Region IX. Ms. Hoffman added that in March 2009, ADEQ approached MAG with this project indicating that it would be funded utilizing stimulus funding from American Recovery and Reinvestment Act (ARRA) from EPA, Region IX. She stated that MAG checked with some of its member agencies to determine interest in MAG conducting this project. Interest was expressed and on July 22, 2009, the MAG Regional Council accepted stimulus funds from ADEQ for Developing a Roadmap for Greening Water Infrastructure. Ms. Hoffman commented that the project included conducting a workshop for greening infrastructure for water and wastewater treatment plants, focusing on Arizona issues and preparing a roadmap for greening water infrastructure. She added that the goal for this project was to engage municipalities, counties, Native American Indian communities, and others statewide in successful strategies for greening water and wastewater infrastructure.

Ms. Hoffman stated that MAG formed the Greening Water and Wastewater Infrastructure Planning Group to assist with this project. She indicated that the Planning Group provided guidance on topics and speakers for the workshop that would provide the greatest benefit to water and wastewater utilities in the state. She commented that the Planning Group also surveyed the MAG member agencies to receive feedback on topics as well as what is being done in the region with regard to greening water and wastewater infrastructure. Ms. Hoffman indicated that it was clear that there was interest in opportunities for reducing energy consumption and saving critical financial resources. She added that there was also interest expressed in addressing short-term options that could have long-term impacts for greening water and wastewater infrastructure.

Ms. Hoffman stated that the Planning Group found it important to keep in mind that cities are facing decreased revenues and needing to push capital improvement projects further into the future. Given the electricity costs associated with processing and distributing water and wastewater, options for

energy reductions and lowering costs seemed to be appropriate topics for the event. In addition, the Planning Group assisted MAG with many other logistics of the workshop including setting the agenda. She commented that the Planning Group made the workshop a success. Ms. Hoffman stated that the workshop was held on January 12, 2010. She added that there were participants representing public and private utilities, consulting firms, academia, state and federal agencies, and others from around the state. She indicated that the workshop highlighted strategies for integrating green technologies into water and wastewater treatment as well as funding opportunities that are available for green projects.

Ms. Hoffman discussed the speakers from the workshop. She mentioned that Councilwoman Peggy Neely, City of Phoenix, is the Chair of the MAG Regional Council and provided the opening remarks. She noted that Benjamin Grumbles, Director of ADEQ, discussed sustainability and the water/energy nexus. Shonnie Cline, Water Research Foundation, was the keynote speaker and also discussed the connection between water and energy. Ms. Hoffman added that Cheryl McGovern, EPA Region IX, provided information related to ways EPA could assist utilities as part of the closing for the workshop.

Ms. Hoffman stated that the workshop also included four sessions. The first session addressed audits which was an area of great interest to many of the participants. She added that audits could be conducted at any facility regardless of size or location. Ms. Hoffman noted that audits may result in significant savings for facilities. She indicated that the funding session provided workshop participants with some of the funding opportunities that are available for green projects. Stepping toward sustainability was a session that highlighted green projects currently being done in the region. Ms. Hoffman stated that the last session included presentations on energy opportunities.

Ms. Hoffman stated that following the workshop, MAG provided the participants with contact information for all attendees to encourage continued dialogue. She added that the presentations from the workshop were also posted on the MAG website. She noted that each presentation has been downloaded over 100 times. Ms. Hoffman stated that an article on the workshop was also featured in the February-April 2010 issue of the *MAGAZine*, which is a quarterly MAG publication with approximately 4,000 subscribers.

Ms. Hoffman indicated that the next step in the project was developing the Roadmap for Greening Water Infrastructure. She mentioned that the Planning Group met February 18, 2010 and drew on ideas from the workshop as well as activities within their own jurisdictions for making water and wastewater treatment plants more sustainable. She stated that the ideas have been summarized and potential resources, contacts, and the next steps have been provided.

Ms. Hoffman discussed the ideas provided by the Planning Group for greening water and wastewater infrastructure. She indicated that the Planning Group identified opportunities for more facilities to conduct audits. These opportunities include utilizing the EPA ENERGY STAR Program and having ADEQ potentially spearhead a "reality audit," where they would audit a small facility that could serve as a model for others to follow. Ms. Hoffman commented that benchmarking is another idea that was mentioned. She added that the EPA ENERGY STAR Portfolio Manager could be used to benchmark facilities relative to performance metrics and other facilities. Ms. Hoffman mentioned that other ideas include: opportunities with energy performance contracts and loans; potential studies for solar; hydroturbines; a WIFA study for reclaimed water; sustainability components in General

Plans/Master Plans and 208 Water Quality Management Plans; information exchange; and specialized workshops.

Ms. Hoffman stated that the next step for the project includes the distribution of the roadmap to assist utilities in evaluating opportunities to reduce energy consumption and chemical use, conserve water, and save critical financial resources. She added that continued dialogue on reducing the carbon footprint of water and wastewater treatment plants and exploring the use of alternative energy sources will be encouraged. In addition, we are all striving toward a more sustainable future.

Dr. Klopatek inquired about the discussions on hydroturbines and the amount of water they use. Ms. Hoffman responded that a representative from the City of Phoenix provided a presentation at the workshop on efforts Phoenix has made related to hydroturbines; however, she does not have the details of the project. She added that one of the ideas provided by the Planning Group was to conduct a study on hydroturbines to determine their potential since they are not traditionally used in water distribution systems.

9. Proposed Update to the MAG 208 Water Quality Management Plan

Chair McNeil stated that when the 208 Plan Amendments are approved they do not get incorporated into the document as a whole. He added the amendments are separate documents until the plan is updated.

Ms. Hoffman discussed the proposed update to the MAG 208 Water Quality Management Plan. She stated that the MAG FY 2011 Unified Planning Work Program that will begin on July 1, 2010, includes a project to update to the 208 Plan. Ms. Hoffman added that this update is to incorporate the 208 Plan Amendments and Small Plant Review and Approvals that have been approved by the MAG Regional Council and ADEQ into the MAG 208 Plan document. Ms. Hoffman indicated that since the last update in 2002, approximately 25 208 Plan Amendments and Small Plant Review and Approvals have been approved. She commented that updating the 208 Plan to include all the documents would be useful for those looking to see what has been approved and get a complete picture. Ms. Hoffman noted that the MAG Regional Council approved the FY 2011 Unified Planning Work Program on May 26, 2010.

Dr. Klopatek commented on the changes over the past ten years. She added that having additional knowledge would be a benefit to the Committee. She inquired if money was an issue with regard to an update. Ms. Hoffman responded that MAG is not looking to hire a consultant to do a major update at this point in time. She added that updating the Plan to include the amendments now will be helpful for the next major update of the 208 Plan. Dr. Klopatek inquired about the timing for a future update. Ms. Hoffman responded that she was uncertain when a major update would be conducted. She added that in the past, the 208 Plan has typically been updated approximately every ten years. Ms. Hoffman indicated that the Plan was last updated in 2002.

Dr. Klopatek inquired if the Committee could work on an update for the 208 Plan. Chair McNeil responded that the Committee is empowered to review amendments to the Plan. He noted that the Committee has not met for two years since development came to a halt with the economic downturn. Chair McNeil added that the Committee has been discussing sustainability; however, the current Plan is ten years old and has no strong sustainability components. He commented on the Greening Water Infrastructure project that was presented by Ms. Hoffman. Chair McNeil stated that the Roadmap for Greening Water Infrastructure mentions the ideas of sustainability in the 208 Water

Quality Management Plans. In addition, it says ADEQ has indicated that sustainability and infrastructure greening issues must be addressed in 208 Plans. Chair McNeil noted that the SouthEastern Arizona Governments Organization along with CAAG have been updating their 208 Plans. He mentioned that the role of the Committee is for 208 related issues. Chair McNeil added that during this economic downturn, the Committee may have the opportunity to provide the resources and expertise for a Plan update. He inquired if the Committee could take on the responsibility for updating the 208 Plan as oppose to coming up with the funds and contract it out to a consultant. Ms. Hoffman responded that she would report back on the possibility of having the Committee work on updating the Plan. She added that potentially, ideas or sustainability opportunities could be considered as part of the Plan update.

Dr. Klopatek stated that maybe the Committee could develop a working list in terms of what would be of interest and then focus on points from that list. She added that the Committee could then turn those points over to a consultant and indicate the critical areas that the Committee could use assistance. Dr. Klopatek noted that the Committee could probably scope the 208 Plan before it is sent to a consultant. Chair McNeil mentioned that the Committee has discussed the workshop results and the recommendations of the Blue Ribbon Panel that could contribute to a 208 Plan update. He added that the Committee could also review and discuss the Plan to identify the things that need to be revisited. Chair McNeil commented that there has been emphasis on regional treatment versus distributed wastewater treatment. This was before there was a big emphasis on reclaimed water reuse in individual communities. He noted that these items could be listed for future consideration. Dr. Klopatek mentioned H.B. 2661 where the Governor has indicated that a new Committee will be formed which will deal with water related issues. Dr. Klopatek commented that there is a lot of things going on in the water world. She discussed a holistic approach and the Committee looking at more than 208 issues.

Vice Chair Iwanski inquired if MAG will update the Municipal Planning Areas (MPAs). Ms. Hoffman responded that it is most likely that MAG will also need to update MPAs since some of the plants would be located outside the MPA boundaries that are currently identified in the 208 Plan. Vice Chair Iwanski commented that there are private water companies that have relinquished territory to join municipalities. He added that he is happy to hear that the MPAs will be updated. Ms. Hoffman stated that the current 208 Plan document includes the MPA boundaries as they existed in 2002. She added that the boundaries would be updated to reflect the current MPAs. Dr. Klopatek inquired about mapping during this interim planning period. Ms. Hoffman responded that she would work with MAG staff.

Chair McNeil stated that the idea for a priority list for the next update can be discussed at the next meeting. Ms. Sorensen indicated her support and agreement with Dr. Klopatek. She added that she would hate to see ten years pass and all the Committee has done is approve amendments. Ms. Sorensen added that resources are limited; however, the region has learned to do better with less and that could also be accomplished with this Committee. Vice Chair Iwanski agreed that the Committee should scope new ideas for a 208 Plan update. Rich Williams, City of Surprise, also agreed with updating the 208 Plan. He added that the past eight years have been the greatest years for development. Mr. Williams indicated that the development community and private sectors are sensitive to new issues. He expressed concern about waiting too long to bring greening and sustainability issues forward.

10. Call for Future Agenda Items

Chair McNeil discussed that the 208 Plan update could serve as a basis for the next Water Quality Advisory Committee meeting. Dr. Klopatek commented on state laws and offered to update the Committee on the water issues that are being discussed at the State Legislature.

With no further comments, Chair McNeil thanked the Committee for participating and called for adjournment of the meeting at 3:59 p.m.

November 1, 2010

TO: Members of the MAG Water Quality Advisory Committee

FROM: Julie Hoffman, Environmental Planning Program Manager

SUBJECT: CHAIR AND VICE CHAIR APPOINTMENTS

On July 22, 2009, the MAG Regional Council approved the MAG Committee Operating Policies and Procedures. Officer positions for technical committees have one-year terms, with possible reappointment to serve up to one additional term, by consent of the respective committee. According to these policies and procedures, the chair and vice chair appointments of the MAG Water Quality Advisory Committee are due to expire on December 31, 2010.

Technical committees may choose to do one of the following: 1) recommend reappointment of the current chair and vice chair to serve a second one-year term, or 2) have the vice chair ascend to the chair position and have a new vice chair appointed by the Regional Council Executive Committee. Officer reappointments will require action by the Water Quality Advisory Committee at its November 8, 2010 meeting. Committees that choose to have the Executive Committee appoint a new vice chair will require letters of interest from MAG member agencies. The letters of interest are requested to be submitted by Monday, November 8, 2010 to Mayor Thomas Schoaf, MAG Chair, at the MAG Office located at 302 N. 1<sup>st</sup> Avenue, Suite 300, Phoenix, Arizona 85003. The appointments will be made at the November 15, 2010 Executive Committee meeting.

If you have any question, please contact Julie Hoffman at the MAG Office at (602) 254-6300 or [jhoffman@azmag.gov](mailto:jhoffman@azmag.gov).

cc: MAG Management Committee  
MAG Intergovernmental Representatives