

**RESPONSE TO PUBLIC COMMENTS ON THE  
DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN  
POINT SOURCE UPDATE**

**MAY 21, 2014 PUBLIC HEARING**

The Maricopa Association of Governments (MAG) appreciates the comments made on the Draft MAG 208 Water Quality Management Plan Point Source Update. On April 1, 2014, the MAG Water Quality Advisory Committee authorized a public hearing on the Draft Point Source Update. The comments below were received following the April 1, 2014 meeting of the MAG Water Quality Advisory Committee.

COMMENTS FROM THE CITY OF EL MIRAGE (Email from Larry Dobrosky dated April 3, 2014)

Comment: Page 2-59 Change B to B+ (we are required to produce B+).

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: Figure 2.8 (map) is slightly off. A few of Surprise sewer lines are shown in El Mirage. Jamie can email you some updated maps tomorrow morning, but one question came up: is the map for sewer lines 18" and above or all lines?

Response: The figures in the Draft MAG 208 Water Quality Management Plan Point Source Update were revised to reflect that there are no Surprise sewer lines located in the El Mirage Municipal Planning Area. The sewer lines were included in the City of Surprise. The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Chapter Two of the Draft Point Source Update includes maps of the Municipal Planning Areas for the jurisdictions in Maricopa County. These figures illustrate the desired wastewater treatment configuration for the communities and include existing and future interceptors. For some jurisdictions, many of the lines are included. However, for other communities, especially the larger municipalities, only the bigger sewer lines are shown on the figures.

COMMENTS FROM THE CITY OF EL MIRAGE (Email from Jamie McCullough dated April 4, 2014)

Comment: Can you use this map in pdf or do you need a different program? (The map provided by El Mirage included the force mains and gravity mains in the City of El Mirage in pdf format.)

Response: The figures included in Chapter Two of the Draft Point Source Update reflect the desired wastewater treatment configuration for the communities, including the existing and future interceptors. For some jurisdictions, many of the sewer lines are included. However, for other communities, especially the larger municipalities, only the bigger lines are shown on

the figures. Including all of the sewer lines may make the figures difficult to read. It was requested that a map be provided to MAG in a shapefile format.

COMMENTS FROM THE CITY OF EL MIRAGE (Email from Jamie McCullough dated April 4, 2014)

Comment: I hope one of these works for you. Let me know. (The map was provided by El Mirage in shapefile and pdf formats illustrating the main wastewater lines 10 inches and greater in El Mirage. In addition, the map included the existing lift station in the City.)

Response: The figures in the Draft Point Source Update that include the El Mirage Municipal Planning Area have been revised to reflect the City's wastewater lines 10 inches and greater and its existing lift station, as shown on the map provided by El Mirage. The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE CITY OF MESA (Email from Carlos Padilla dated April 4, 2014)

Comment: The map does not go south far enough to show the Greenfield Water Reclamation Plant. It is located on the west side of Greenfield Road between Germann and Queen Creek Roads (4400 S. Greenfield Rd, Gilbert). Please make this correction.

Response: Figure 2.22, Mesa Municipal Planning Area, has been revised to show the location of the Greenfield Water Reclamation Plant. The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-151, first paragraph, second sentence, change to read, "In 2012, Mesa completed a Sewer Master Plan Update."

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-151, first paragraph, fifth sentence, change to read, "The Planning Area includes all of the incorporated City of Mesa (including Williams Gateway Airport) and some unincorporated areas within Maricopa County, corresponding to Regional Analysis Zones (RAZ) 289, 290, 291, 292, 293, 294, 295, 298, 299, 300, 309, 320, 321, and 322."

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-151, third paragraph, second sentence, change to read, "Table 2.29 presents the 2010 through 2040 population for the City of Mesa based on the 2013 MAG population projections and extensive land utilization based flow projections." Add a third sentence to read, "The equivalent per capita flow varies depending on the ratio of commercial/industrial vs. residential developments within the City."

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-151, revise Table 2.29 to reflect the following flows:

<b>Year</b>	<b>Population</b>	<b>Flow (mgd)</b>
2010	535,928	33.5
2020	608,359	45.3
2030	685,071	58.2
2040	717,071	68.5

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-151, fourth paragraph, first sentence, change to read, “The wastewater collection serving the City of Mesa Planning Area consists of more than 1,600 miles of collection and interceptor sewers, 15 lift stations, and 21 Odor Control Stations.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-155, first paragraph, first and second sentences, change to read, “The Baseline Road, Southern Avenue, and 8<sup>th</sup> Street Interceptors convey wastewater from Mesa (through Tempe) to the Salt River Outfall (SRO) and the Southern Avenue Interceptor (SAI) to the SROG 91<sup>st</sup> Avenue Wastewater Treatment Plant WWTP. The City of Mesa currently owns capacities ranging from 19.6 to 36.6 mgd in the SRO and 12 to 22 mgd in the SAI.”

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-155, second paragraph, second sentence, change to read, “Flow from the CMI can also be diverted to the SRO via the 8<sup>th</sup> Street Interceptor and/or the SAI for treatment at the 91<sup>st</sup> Avenue WWTP.”

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-155, fifth paragraph, third sentence, change to read, “Mesa’s current ownership capacity at this facility is 4.0 mgd, with a projected build-out capacity of 26.0 mgd, which includes a 6.0 mgd pump back from SROG.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update. In addition, since the Greenfield Water Reclamation Plant is located in the Town of Gilbert, a description of the facility is also included in the Gilbert

Section of the update. On Page 2-148, sixth paragraph, the third sentence was revised to read, "Ultimately, the plant will be expanded to treat approximately 50 mgd (Gilbert - 16 mgd, Mesa - 26 mgd, Queen Creek - 8 mgd)." The change to Page 2-148 was reviewed by the Town of Gilbert. Table ES.1, Point Source Plan Summary, on Page ES-6, has also been revised to reflect that the ultimate capacity for the Greenfield Water Reclamation Plant has changed from 52 mgd to 50 mgd since the Mesa projected build-out capacity has decreased from 28.0 mgd to 26.0 mgd. The changes were made to the Draft Point Source Update prior to the 30 day public review period.

Comment: On Page 2-155, under Northwest Water Reclamation Plant, revise the eighth bullet to read, "Chlorine Disinfection." On Page 2-156, revise the first bullet to read, "Dechlorination."

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-156, first paragraph, add a second sentence to read, "The plant produces Class A+ Effluent and Class B Sludge."

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-156, under Southeast Water Reclamation Plant, delete the seventh bullet, "UV Disinfection." Revise the eighth bullet to read, "Chlorine Disinfection." Add a bullet to read, "Dechlorination." Add a paragraph following the bullets to read, "The plant produces Class A+ Effluent. The plant does not have a solids treatment, and primary/secondary sludge is pumped to GWRP for solids treatment."

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-156, under Greenfield Water Reclamation Plant, revise the first bullet to read, "Capacity: 16 mgd total, 4 mgd Mesa (Build-out: 50 mgd total, 26 mgd Mesa, which includes a 6 mgd pumpback)." Revise the ninth bullet to read, "Chlorine Disinfection." Add a paragraph following the bullets to read, "Biosolids treatment consists of single stage anaerobic digesters with primary and secondary sludge thickening and sludge dewatering. The plant produces Class A+ Effluent and Class B Sludge."

Response: The requested changes have been made to Page 2-156 in the Draft MAG 208 Water Quality Management Plan Point Source Update. In addition, since the Greenfield Water Reclamation Plant is located in the Town of Gilbert, a description of the facility is also included in the Gilbert Section of the update. On Page 2-148, sixth paragraph, the third sentence was revised to read, "Ultimately, the plant will be expanded to treat approximately 50 mgd (Gilbert - 16 mgd, Mesa - 26 mgd, Queen Creek - 8 mgd)." The change to Page 2-148 was reviewed by the Town of Gilbert. Table ES.1, Point Source Plan Summary, on Page ES-6, has also been revised to reflect that the ultimate capacity for the Greenfield Water Reclamation Plant has changed from 52 mgd to 50 mgd since the Mesa projected build-out capacity has decreased from 28.0 mgd to 26.0 mgd. The changes were made to the Draft Point Source Update prior to the 30 day public review period.

Comment: On Page 2-156, first paragraph, first sentence under Future Wastewater System Development, change to read, “The City of Mesa is implementing system improvements recommended in the 2012 Wastewater Master Plan Update.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-157, first paragraph, first and second sentences, change to read, “The Brown Road Relief Sewer Project (Phase 1 is complete), will enable the City to divert approximately 3 mgd of flow to the NWWRP that is now sent to the 91<sup>st</sup> Avenue WWTP. The Greenfield Road Pumpback Station, currently programmed for 2027, will allow Mesa to send approximately 6 mgd of flow to the GWRP for treatment that is currently being sent to the 91<sup>st</sup> Avenue plant.”

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-157, second paragraph, first sentence, change to read, “Based on the 2012 Wastewater Master Plan Update and current population projections, future wastewater treatment capacity will be provided by the NWWRP, SEWRP, GWRP, and the SROG 91<sup>st</sup> Avenue WWTP.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-157, revise Table 2.30 to reflect the following flow allocation projections:

<b>Table 2.30 Mesa Wastewater Flow Allocation Projections MAG 208 Water Quality Management Plan Update</b>						
<b>Year</b>	<b>SROG Facilities<sup>1</sup> (mgd)</b>	<b>NWWRP (mgd)</b>	<b>SEWRP (mgd)</b>	<b>GWRP<sup>2</sup> (mgd)</b>	<b>Gilbert Residuals<sup>3</sup> (mgd)</b>	<b>Total Treated Flow (mgd)</b>
2010	17.8	8.4	4.0	3.3	0.56	33.5
2015	18.5	9.1	7.1	3.4 <sup>4</sup>	0.62	38.7
2020	19.5	10.5	5.1 <sup>5</sup>	9.6	0.62	45.3
2025	20.4	11.9	6.1	12.7	0.62	51.7
2030	21.3	13.3	7.1	15.9	0.62	58.2

<sup>1</sup> Annual average daily flows. Includes residuals from Gilbert Neely WRF.  
<sup>2</sup> Mesa flow only.  
<sup>3</sup> Gilbert currently sends residuals from their Neely WRF for treatment at the 91<sup>st</sup> Avenue WWTP.  
<sup>4</sup> Some flow from GWRP diverted to SEWRP.  
<sup>5</sup> Flow diversion from SEWRP to GWRP ceases.

Response: The requested changes have been made to Table 2.30, Mesa Wastewater Flow Allocation Projections, on Page 2-157 of the Draft MAG 208 Water Quality Management Plan Point Source Update. In addition, Table 2.34, Projected SROG Service Areas Annual Average Flow, mgd, on Pages 2-171 through 2-172 was updated to reflect the revised wastewater flow allocations for the City of Mesa. The changes were made to the Draft Point Source Update prior to the 30 day public review period.

Comment: On Page 2-157, third paragraph, delete the fifth sentence that states, “Mesa is currently contemplating this additional capacity.” Change the seventh sentence to read, “The recharge basins near the plant site are not used on a regular basis, due to high ground water levels.”

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-157, fourth paragraph, delete the second sentence that states, “Also, a small portion of the reclaimed water from the SEWRP is directly delivered to Leisure World and the Superstition Springs Golf Course where it is used for Open Access Irrigation and Fire Protection.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-158, revise the Summary of Proposed Wastewater System Improvements to reflect the following costs:

**Summary of Proposed Wastewater System Improvements.** Estimated Capital improvements through the year 2019 are summarized below:

<u>Item</u>	<u>Estimated Cost<sup>1</sup></u>
Collection System Expansion and Improvements	\$35,400,000
GWRP Expansion <sup>2</sup>	99,500,000
Water Reclamation Plant Improvements	30,500,000
Sewer Line Rehabilitation	<u>29,300,000</u>
Total	<u>\$194,700,000</u>

<sup>1</sup>January 2014 costs ENR Construction Cost Index 9664

<sup>2</sup>Mesa cost only

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-158, under Contract Customer Service, delete the third sentence that states, “The City currently plans on terminating this agreement by 2018.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE CITY OF MESA (Email from Carlos Padilla dated April 4, 2014)

Comment: On Page 2-148, sixth paragraph, second and third sentences, change to read, “The next phase of plant expansion is currently scheduled to be complete in 2018. Ultimately, the plant will be expanded to treat approximately 50 mgd (Gilbert - 16 mgd, Mesa - 26 mgd, Queen Creek - 8 mgd).”

Response: The Greenfield Water Reclamation Plant is located in the Town of Gilbert and a description of the facility and flow allocations are included in the Gilbert Section of the Draft Point Source Update. The requested changes have been made to Page 2-148 to revise the ultimate capacity for the Greenfield Plant from 52 mgd to 50 mgd due to Mesa’s projected build-out capacity decreasing from 28 mgd to 26 mgd. These changes are consistent with the revisions made to the Mesa section regarding the capacity of the Greenfield Plant. The schedule for the next phase of expansion was also revised from 2017 to 2018. The changes to Page 2-148 were reviewed by the Town of Gilbert. Table ES.1, Point Source Plan Summary, on Page ES-6, has also been revised to reflect that the ultimate capacity for the Greenfield Water Reclamation Plant has changed from 52 mgd to 50 mgd since the Mesa projected build-out capacity has decreased from 28 mgd to 26 mgd. The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE CITY OF BUCKEYE (Email from Richard Cohen dated April 10, 2014)

Comment: On Page 2-25, fifth paragraph, first sentence, change to read, “The Central Buckeye WWTP currently discharges effluent into the Buckeye Water Conservation Drainage Ditch (BID) under an Arizona Pollutant Discharge Elimination System (AZPDES) permit.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-25, fifth paragraph, third and fourth sentences, change to read, “The facility does not currently recharge. Direct reuse is to the Earl Edgar Park, with other possible sites dependant upon the construction of the facility reuse infrastructure to serve potential customers.”

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-25, sixth paragraph, fifth sentence, change to read, “Effluent is currently reused for irrigation on three golf courses, public access parks, turf facilities at schools and irrigation on rights-of-way landscaping.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: On Page 2-26, second paragraph, sixth and seventh sentences, change to read, “An effluent line also conveys flows to the Buckeye Canal. Effluent in excess of reuse demand is discharged to the Buckeye and/or Roosevelt Canals under AZPDES permits.”

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE FORT MCDOWELL YAVAPAI NATION (Email from Mark Frank dated April 14, 2014)

Comment: Population and Flow Projections - The current (2014) population of FMYN is 1,072.

Response: As discussed during an April 14, 2014 phone call, the Draft MAG 208 Water Quality Management Plan Point Source Update includes two types of population projections: resident and nonresident. Information on the projections is included on Page 2-5 and in Appendix A of the Draft Point Source Update. On June 19, 2013, the MAG Regional Council approved the *MAG Socioeconomic Projections of Population, Housing and Employment by Municipal Planning Area and Regional Analysis Zone, June 2013*. These resident population projections, which were prepared in close collaboration with member agency staff, used the April 1, 2010 Census as the base and projected for July 1<sup>st</sup> of 2010, 2020, 2030, and 2040. The seasonal and transient (nonresident) projections are based on the MAG population projections approved by the MAG Regional Council in June 2013. Seasonal includes people who are in the local area for up to six months. Transient population includes people who are in the local area for two weeks or less. Since wastewater is needed to serve the nonresident population, these projections have also been included. It was agreed that no changes would be made to the population identified for the Fort McDowell Yavapai Nation in the Draft Point Source Update.

Comment: Existing Wastewater Collection and Treatment - The Fort McDowell Yavapai Nation currently operates a 238,000 gallons per day wastewater treatment plant on a site south of the Beeline Highway and west of Fort McDowell Road. A gravity sewer system has been constructed to serve commercial, governmental, and residential users. The WWTP (completed in 2003) is a sequential batch reactor with effluent filters and UV disinfection. Effluent is reused on a limited basis to irrigate two eighteen hole golf courses with the remainder evaporated and recharged. Solids are aerobically digested, dewatered, and sent to a landfill for disposal.

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: Future Wastewater System Development - The WWTP has been constructed for modular expansion as flows increase. The collection system will be completed as funding becomes available.

Response: The requested changes were made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE FORT MCDOWELL YAVAPAI NATION (Phone call with Mark Frank April 14, 2014)

Comment: Delete the Summary of Proposed Improvements from the Fort McDowell Yavapai Nation section.

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

Comment: Revise Figure 2.29, Fort McDowell Yavapai Nation Municipal Planning Area, to delete the Fort McDowell Casino WWTP and reflect that the future Fort McDowell WWTP and reuse/recharge site south of the Beeline Highway are now existing.

Response: The requested changes have been made to Figure 2.29 in the Draft MAG 208 Water Quality Management Plan Point Source Update. In addition, Table ES.1, Point Source Summary, on Page ES-6 has been updated to delete the Casino WWTP and reflect the current capacity of the Fort McDowell WWTP. The changes were made to the Draft Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE TOWN OF GILBERT (Email from Kenneth Morgan dated April 15, 2014)

Comment: On Page 2-143, fourth paragraph, second sentence, change to read, "The current system serves a majority of the area north of Queen Creek Road and west of Power Road."

Response: The requested change was made to the Draft MAG 208 Water Quality Management Plan Point Source Update prior to the 30 day public review period.

COMMENTS FROM THE CITY OF PHOENIX (Email from Randy Gottler dated May 5, 2014)

Comment: On Page 2-7, fifth paragraph, change to read, "The 91<sup>st</sup> Avenue Wastewater Treatment Plant Unified Plant Expansion Phase 1 (UP01) was completed in 2008 and commissioned in 2009. The total treatment plant capacity was expanded to 205 million gallons per day (mgd), and the Phoenix purchased capacity was expanded to 112.9 mgd. The Unified Plant Expansion Phase 2 (UP05) was started in 2009 and completed in 2010. Completion of the Unified Plant Expansion Phase 2 (UP05) improvement elements expanded the total treatment plant capacity to 230 mgd, and the Phoenix purchased capacity was expanded to 134.8 mgd."

Response: The requested changes will be incorporated into the Draft MAG 208 Water Quality Management Plan Point Source Update.

Comment: On Page 2-173, second paragraph, second sentence, change to read, "The Palo Verde Nuclear Generating Station (PVNGS) has contract options for 80,000 acre-feet per year of effluent under an agreement that ends in 2050."

Response: The requested change will be incorporated into the Draft MAG 208 Water Quality Management Plan Point Source Update.

Comment: On Page 2-173, second paragraph, add sixth and seventh sentences to read, “Effluent not sent to PVNGS is sent to the Tres Rios Flow Regulating Wetlands. Discharge from the Tres Rios Flow Regulating Wetlands is either to the Salt River or the Tres Rios Overbank Wetlands and then to the Salt River.”

Response: The requested changes will be incorporated into the Draft MAG 208 Water Quality Management Plan Point Source Update. The additional information included on Page 2-173, in the Multi-City SROG Summary section, regarding effluent disposal at the 91<sup>st</sup> Avenue WWTP is consistent with the effluent disposal description provided in the Phoenix section for the facility.