

302 North 1st Avenue, Suite 300 ▲ Phoenix, Arizona 85003
Phone (602) 254-6300 ▲ FAX (602) 254-6490
E-mail: mag@azmag.gov ▲ Web site: www.azmag.gov

December 17, 2015

TO: Members of the State Water Quality Management Working Group

FROM: Julie Hoffman, Environmental Planning Program Manager

SUBJECT: MAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT FOR THE CENTRAL

BUCKEYE WASTEWATER TREATMENT PLANT ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DISCHARGES TO THE ROOSEVELT CANAL AND

BUCKEYE CANAL

The City of Buckeye has requested that the MAG 208 Water Quality Management Plan be amended to include the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System (AZPDES) Permit Discharges to the Roosevelt Canal and Buckeye Canal. The facility is identified in the MAG 208 Plan with an ultimate capacity of 45.8 million gallons per day. Reclaimed water is currently disposed of through reuse and an AZPDES Permit discharge to a lateral of the Buckeye Canal located near the facility. This amendment identifies additional AZPDES Permit discharge points from the facility to the Roosevelt Canal and Buckeye Canal. The project is located within three miles of unincorporated Maricopa County. Maricopa County has submitted a letter indicating that the project is not in conflict with Maricopa County plans for the area and it is acceptable. On December 16, 2015, the MAG Regional Council approved the MAG 208 Plan Amendment. It is now requested that the State Water Quality Management Working Group make a recommendation to the Arizona Department of Environmental Quality to approve the MAG 208 Plan Amendment.

BACKGROUND INFORMATION

As described in the amendment, the Central Buckeye Wastewater Treatment Plant produces Class A+ effluent and currently discharges to a lateral of the Buckeye Canal located near the facility. Direct reuse also occurs to the Earl Edgar Park. The facility does not currently recharge; however, it is identified as an option. Although this amendment includes two additional AZPDES permit discharge points from the Central Buckeye Wastewater Treatment Plant, the methods of effluent disposal currently identified in the MAG 208 Plan for the facility will continue to remain options.

The proposed Roosevelt Canal discharge point would be located near the Buckeye Sundance Water Reclamation Facility that will also discharge Class A+ effluent to the Roosevelt Canal. The City of Buckeye currently has a Water Storage Permit for the Roosevelt Irrigation District (RID) Groundwater Savings Facility that allows the City to deliver up to 5,000 acre-feet of Class A+ effluent annually to the Roosevelt Canal. The City then receives Long-Term Storage Credits in return for the effluent used by RID customers to reduce groundwater pumping. The Long-Term Storage Credits would be used to maintain the City's 100-year Assured Water Supply.

As a contingency, discharge to the Buckeye Canal would occur at Dean Road, approximately one-quarter mile south of Southern Avenue. The discharge to the Buckeye Canal would be for irrigation on nonedible agricultural crops or landscape irrigation. Currently, the facility discharges to a lateral of the Buckeye Canal located near the Central Buckeye Wastewater Treatment Plant, and this discharge would continue to be an option.

On October 1, 2015, the MAG Water Quality Advisory Committee authorized a public hearing for the Draft MAG 208 Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharges to the Roosevelt Canal and Buckeye Canal. The notice of public hearing was advertised in *The Arizona Republic* on October 3, 2015. The Water Quality Advisory Committee conducted the public hearing on November 17, 2015 and no public comments were received. Immediately following the public hearing, the Water Quality Advisory Committee recommended approval of the Draft MAG 208 Plan Amendment.

On November 18, 2015, the MAG Management Committee recommended approval of the Draft 208 Plan Amendment. On December 16, 2015, the MAG Regional Council took action to approve the MAG 208 Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharges to the Roosevelt Canal and Buckeye Canal.

The MAG 208 Plan Amendment; the letter of official request to initiate the process; the letter from the jurisdiction within a three mile radius; the legal advertisement for public hearing; an official affidavit of public hearing; a notice to interested parties; a notice to Title VI populations; a list of locations where documents are available for viewing; and the public hearing transcript are provided in the attachments.

If you have any questions, please do not hesitate to contact me at (602) 254-6300.

cc: Ron Whitler, City of Buckeye



MAG 208

WATER QUALITY MANAGEMENT PLAN AMENDMENT

for the

CENTRAL BUCKEYE WASTEWATER TREATMENT PLANT ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DISCHARGES

to the

ROOSEVELT CANAL

and

BUCKEYE CANAL

BUCKEYE, ARIZONA

September 14, 2015

TAB	LE OF	F CONTENTS (page 1 of 2)	AGE
1.0	INTR 1.1	Disposal and Reuse Sites 1.1.1 Existing Disposal and Reuse 1.1.2 Proposed Additional Discharge Points 1.1.3 Effluent Currently Discharged Without Benefit 1.1.4 Roosevelt Irrigation District Groundwater Savings Facilit 1.1.5 Construction of Effluent Transmission Main and Roosev Canal Discharge Point 1.1.6 Future Effluent Recharge 1.1.7 Central Buckeye Wastewater Service Area Population Estimate	-
2.0		DANCE WRF METHODS OF EFFLUENT DISPOSAL NGES UNDER THIS 208 PLAN AMENDMENT) Sundance WRF Capacity	(NO 4 5
3.0 4.0 5.0 6.0 7.0 8.0 9.0	REG FINA IMPL PUB CHE	NTY-YEAR NEEDS ULATIONS INCING LEMENTABILITY LIC PARTICIPATION CKLIST AND MAPS ERENCES	5 6 6 7 8 9
FIGU	JRES	(EXHIBITS)	
Exhib	oit 1	Buckeye 208 Plan Proposed Water Reclamation Facilities a Areas (CMX, 2007)	and Service
Exhib	oit 2	Buckeye Effluent Pipeline	
Exhib	oit 3	Discharge Point for Sundance Water Reclamation Facility Buckeye Wastewater Treatment Plant	and Central
Exhib	oit 4	Sundance Wastewater Service Area and Central Buckeye Service Area	Wastewater
Exhib	oit 5	Existing Conditions Map	

TABLE OF CONTENTS (page 2 of 2)

Exhibit 6 Future Effluent Customers

Exhibit 7 Central Buckeye Wastewater Treatment Plant to Sundance Water Reclamation Facility Effluent Line Alignment

Effluent Discharge and Reuse Options Schematic, Central Buckeye

WWTP and Sundance WRF

APPENDICES

Exhibit 8

APPENDIX A Letters:

- Letter of Sponsorship from the City of Buckeye
- Letter from the Jurisdiction Within Three Miles (Maricopa County)
- Letter of Financial Capability from the City's Finance Director

APPENDIX B 208 Amendment Checklist

1.0 INTRODUCTION

In accordance with Section 208 of the Clean Water Act, the Designated Planning Agency for Maricopa County, Arizona is the Maricopa Association of Governments (MAG). The City of Buckeye (City) is the Designated Management Agency for the Buckeye Municipal Planning Area (Exhibits 1 and 2).

The purpose of this application is to request an amendment to the MAG 208 Water Quality Management Plan for additional Arizona Pollutant Discharge Elimination System (AZPDES) permit discharge points from the Central Buckeye Wastewater Treatment Plant (Central Buckeye WWTP). The additional discharge points will enable Class A+effluent to be discharged from the Central Buckeye WWTP to the Roosevelt Canal (also known as the Roosevelt Irrigation District Canal or RID Canal) and the Buckeye Canal (Exhibits 2, 3, 4 and 8). The purpose of this amendment is to allow discharge to the Roosevelt Canal, with a contingency discharge to the Buckeye Canal.

The Roosevelt Canal discharge point would be located near the City's Sundance Water Reclamation Facility (WRF) that will also discharge Class A+ effluent to the Roosevelt Canal. The discharge from the Sundance WRF effluent to the Roosevelt Canal is already identified in the MAG 208 Water Quality Management Plan. The contingency discharge to the Buckeye Canal would be located about ¼-mile south of Southern Avenue at Dean Road (Exhibit 8).

The Central Buckeye WWTP and Sundance WRF are owned and operated by the City. The Roosevelt Canal is owned and operated by Roosevelt Irrigation District (RID). RID delivers water to irrigated lands within its district. The Buckeye Canal is owned and operated by Buckeye Water Conservation and Drainage District (BWCDD). BWCDD delivers water to irrigated lands within its district.

The following letters are included in Appendix A:

- A letter of sponsorship from the City of Buckeye;
- A letter from the jurisdiction within three miles (Maricopa County), and,
- A letter of financial capability from the City's Finance Director.

1.1 Disposal and Reuse Sites

1.1.1 Existing Disposal and Reuse

The MAG 208 Water Quality Management Plan Point Source Update, approved by the MAG Regional Council on June 25, 2014, describes the method of effluent disposal for the Central Buckeye WWTP as follows:

Central Buckeye WWTP existing disposal and reuse:

The Central Buckeye WWTP currently discharges effluent into the Buckeye Water Conservation Drainage Ditch (BID) under an Arizona Pollutant Discharge Elimination System (AZPDES) permit. The effluent is used downstream for

irrigation of nonedible agricultural crops. The facility does not currently recharge. Direct reuse is to the Earl Edgar Park, with other possible sites dependent upon the construction of the facility reuse infrastructure to serve potential customers. Recharge would likely need to be performed off-site due to waterlogged conditions at the facility site (MAG, 2014).

Although this proposed amendment requests approval of additional AZPDES permit discharge points from the Central Buckeye WWTP, the methods of disposal currently identified for the Central Buckeye WWTP will continue to remain options. Currently, discharge occurs to a lateral of the Buckeye Canal, near the Central Buckeye WWTP. Discharge to a lateral of the Buckeye Canal will continue to be an option.

1.1.2 <u>Proposed Additional Discharge Points</u>

This application requests that the MAG 208 Water Quality Management Plan be amended to include the following additional methods of disposal and reuse for the Central Buckeye WWTP:

- Reuse for irrigation in the Roosevelt Irrigation District canal, through discharge into the canal at a location east of Dean Road and adjacent to the Sundance WRF (Exhibits 2 through 4). Class A+ effluent from the Central Buckeye WWTP and Sundance WRF can be combined at the additional discharge point (effluent from either plant or both can be discharged).
- As a contingency, discharge to the Buckeye Canal would occur at Dean Road, about ¼-mile south of Southern Avenue (see exhibit 8). The contingency discharge to the Buckeye Canal would be for irrigation of non-edible agricultural crops or landscape irrigation. Currently, discharge occurs to a lateral of the Buckeye Canal located near the Central Buckeye WWTP, and this discharge would continue to be an option.

Reuse will occur at the Sundance Golf Course. Reuse will also occur at the City of Buckeye's Sundance Park. The reclaimed water irrigation system has already been constructed to irrigate Sundance Park. In addition, reuse will occur at other sites including schools, other parks, and other landscaping areas in the future. Reuse at the other sites is dependent upon the construction of the facility reuse infrastructure to serve the potential customers.

Furthermore, recharge will also likely occur. A recharge feasibility study will be necessary to determine the hydrologic feasibility, recharge locations and recharge methods. However, recharge will likely occur north of the Roosevelt Canal.

1.1.3 Effluent Currently Discharged Without Benefit

The Sundance WRF and the Central Buckeye WWTP both produce A+ quality effluent, however only a portion of the effluent currently produced by these plants is used for direct reuse. About 700 acre-feet per year (228 million gallons) of the effluent combined from the plants is beneficially reused. The remainder of the effluent from the Sundance

WRF and Central Buckeye WWTP (about 1,500 acre-feet per year or 489 million gallons) is disposed of by discharging to the Buckeye Water Conservation and Drainage District canals. Buckeye Water Conservation and Drainage District receives the effluent from the City's wastewater treatment plants at no cost. The City is not currently receiving any benefit or recharge credits for discharging the effluent to the Buckeye Water Conservation and Drainage District canals.

1.1.4 Roosevelt Irrigation District Groundwater Savings Facility

Roosevelt Irrigation District (RID) has a Groundwater Savings Facility (GSF) that is permitted by the Arizona Department of Water Resources (ADWR) to accept up to 60,000 acre-feet of effluent annually into the Roosevelt Canal, and deliver it as a renewable water supply, called "in-lieu" water. The "in-lieu" water is delivered to recipients (such as a farmer to irrigate non-edible agricultural crops, the Buckeye Cemetery to irrigate turf, or City parks to irrigate turf) to replace groundwater pumping with the "in lieu" water. This creates a groundwater savings. Entities with a Water Storage permit may deliver effluent to the Roosevelt Canal and receive Long-Term Storage Credits (LTSCs) in return for the groundwater savings.

The City currently has a Water Storage permit for RID's GSF. The Water Storage permit allows the City to deliver up to 5,000 acre-feet (1,629 million gallons) of Class A+ effluent annually to the Roosevelt Canal and receive LTSCs in return for the effluent used by RID customers to reduce groundwater pumping.

The City plans to discharge Class A+ effluent into the Roosevelt Canal from the Central Buckeye WWTP and Sundance WRF. In return, the City will receive LTSCs which will be required to maintain a 100-year Assured Water Supply.

1.1.5 Construction of Effluent Transmission Main and Roosevelt Canal Discharge Point

A 12-inch transmission main will be constructed to convey the effluent from the Central Buckeye WWTP to the Sundance WRF (Exhibits 5 through 8), allowing the effluent to be discharged into the Roosevelt Canal (also known as the Roosevelt Irrigation District Canal or RID Canal). The transmission pipeline route trends north from the Central Buckeye WWTP for about 1,200 feet until it reaches Beloat Road, then east along Beloat Road to Dean Road, then north along Dean Road until it crosses beneath the Buckeye Canal, then it continues north until it crosses beneath the RID Canal, then east until it reaches the Sundance WRF. The effluent may then be discharged into the Roosevelt Canal or sent to various reuse locations. The transmission pipeline route is entirely within the City's Municipal Planning Area and portions are within the City's incorporated area. The 12-inch pipeline from the Central Buckeye WWTP and the pump station are designed to convey 1.2 MGD. In addition to discharging effluent into the RID Canal, the effluent will also be used to irrigate the Sundance Golf Course and Sundance Park (Exhibits 6 and 8). Turf areas at various schools may also be irrigated in the future (Exhibit 6). In the event that discharge to the Roosevelt Canal or reuse options are not available, a contingency discharge may occur to the Buckeye Canal at Dean Road, about 1/4-mile south of Southern Avenue.

The City will construct, operate and maintain the effluent transmission main, discharge pipe and meter to the Roosevelt Canal. Construction of the reclaimed water line project was 62% complete as of July 16, 2015. Construction of the reclaimed water line is anticipated to be completed by December 31, 2015. The contract completion date is January 28, 2016.

1.1.6 Future Effluent Recharge

In December 2011 groundwater was measured at a depth of 3 feet below ground surface at the Central Buckeye WWTP. Consequently, effluent from the Central Buckeye WWTP cannot be recharged near the CBWWTF, due to the shallow groundwater conditions. Construction of the effluent transmission main to convey effluent from the Central Buckeye WWTP to the Sundance WRF will allow Class A+ effluent from the Central Buckeye WWTP and Sundance WRF to be potentially recharged at a location north of the Roosevelt Canal in the future. The depth to groundwater north of the Roosevelt Canal, near the Sundance WRF, is currently approximately 180 feet or more. Recharge methods and locations have not yet been selected, but the recharge methods could consist of vadose zone recharge wells, infiltration trenches, or percolation basins.

1.1.7 Central Buckeye Wastewater Service Area Population Estimate

The Central Buckeye Wastewater Service Area is primarily located in Regional Analysis Zone (RAZ) 278 and a portion of RAZ 279. The population projected in 2040 for RAZ 278 and 279 is 84,828 and 62,737, respectively (MAG Socioeconomic Projections, June 2013).

2.0 SUNDANCE WRF METHODS OF EFFLUENT DISPOSAL (NO CHANGES UNDER THIS 208 AMENDMENT)

The Sundance WRF will be connected to the proposed new AZPDES permit discharge from the Central Buckeye WWTP, but this MAG 208 Water Quality Management Plan amendment is not proposing any changes to the Sundance WRF or to the AZPDES permit discharge points from the Sundance WRF.

The MAG 208 Water Quality Management Plan Point Source Update, approved by the MAG Regional Council on June 25, 2014, describes the method of effluent disposal for the Sundance WRF as follows:

Effluent is currently reused as irrigation for a golf course [Sundance golf course]
 (CMX, 2007). 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. Recharge may not be feasible onsite due to
 constrained site conditions. Potentially, recharge facilities could be constructed;
 however, further investigation may be needed into the groundwater conditions in
 the area (CMX, 2007).

2.1 Sundance WRF Capacity

The current capacity of the Sundance WRF is 3.5 MGD. After future expansions, the Sundance WWTP is anticipated to have an ultimate capacity of 13.9 MGD.

3.0 TWENTY-YEAR NEEDS

This project will allow about 1,500 acre-feet per year or 489 million gallons of Class A+ effluent that is currently discharged without benefit to the City to be beneficially reused (about 1,100 acre-feet of the effluent will be from the Central Buckeye WWTP and 400 acre-feet from the Sundance WRF). In return for the effluent that is discharged to the Roosevelt Canal, the City will receive LTSCs which will be required for the City to maintain a 100-year Assured Water Supply. Construction of the effluent transmission main will also allow effluent transmission main will also allow effluent from the Central Buckeye WWTP to be potentially recharged at a location north of the Roosevelt Canal in the future. The beneficial reuse and recharge of this effluent will conserve potable water supplies, which will be necessary to meet the needs of a growing population. In the event that discharge to the Roosevelt Canal or reuse options are not available, a contingency discharge may occur to the Buckeye Canal at Dean Road, about ¼-mile south of Southern Avenue. There will also be the option of discharging to a lateral of the Buckeye Canal, near the Central Buckeye WWTP.

Sundance Park has been issued a turf conservation allotment of 57.14 acre-feet per year by the Arizona Department of Water Resources. The park is currently irrigated using untreated groundwater pumped from a City of Buckeye well. The use of Class A+ effluent to irrigate the park, instead of groundwater, will conserve approximately 57 acre-feet or 18.6 million gallons of groundwater per year. As the park expands in the future, the effluent demands will grow and even more groundwater will be conserved by using effluent to irrigate the park.

The Central Buckeye Wastewater Service Area is primarily located in Regional Analysis Zone (RAZ) 278 and a portion of RAZ 279. The population projected in 2040 for RAZ 278 and 279 is 84,828 and 62,737, respectively (MAG Socioeconomic Projections, June 2013). The current design capacity of the Central Buckeye WWTP is 4.5 MGD. Future expansions will consist of multiple phases of construction, resulting in an ultimate capacity of 45.8 MGD. The Central Buckeye WWTP is located south of Beloat Road, between Miller and Apache Road. The address is 915 South 7th Street, Buckeye, Arizona 85326. The treatment process includes influent pumping, mechanically and manually cleaned bar screens, grit removal, secondary treatment, (Bardenpha process for nitrification/denitrification), secondary clarification, tertiary filtration and chlorination/dechlorination. The Central Buckeye WWTP treats domestic and commercial wastewater to Class A+ standards.

4.0 REGULATIONS

Permits from the following agencies are required to construct and operate the effluent transmission main, to discharge effluent to the Roosevelt and Buckeye Canals, and to use the effluent for landscape irrigation when it is not discharged to the Roosevelt or Buckeye Canals.

- Arizona Department of Environmental Quality: The Existing Arizona Pollutant Discharge Elimination System (AZPDES) permits will be modified for the Central Buckeye WWTP and the Sundance WRF. A Type 3 Reclaimed Water agent permit has been obtained to reuse the Class A+ effluent for landscape irrigation at Sundance Park, Sundance Golf Course, and other facilities. Storm water pollution prevention will be achieved through a storm water pollution prevention plan.
- Arizona Department of Water Resources: A Water Storage Permit has been obtained for the Roosevelt Irrigation District Groundwater Savings Facility.
- Maricopa County Environmental Services Department (MCESD) Approval to Construct (ATC) and Approval of Construction is required from MCESD. The City obtained the Certificate of Approval to Construct on January 29, 2015.
- Maricopa County Air Quality Department. The City obtained a Maricopa County dust control block permit. Dust control will be achieved using a water truck and trackout control.
- Maricopa County Department of Transportation: The City obtained a permit to construct the effluent pipeline in the Maricopa County right-of-way.

5.0 FINANCING

Financing to construct the reclaimed water line project was approved by the City Council. The project is being financed by a Water Infrastructure Finance Authority of Arizona (WIFA) loan with payback through reclaimed water rates and sewer rates. The approved cost of the project is \$6.6 million. The City's Finance Director has provided a letter of financial capability which is included in Appendix A.

6.0 IMPLEMENTABILITY

The City is committed to constructing, operating and maintaining the effluent transmission main, discharge pipes and meters. To attest to the City's commitment to constructing this project, construction of the reclaimed water line project was 62% complete as of July 16, 2015. Construction of the reclaimed water line is anticipated to be completed by December 31, 2015. The contract completion date is January 28, 2016.

The City is committed to completing this project because the project will have many benefits for the City including:

- Accruing LTSCs from discharging the Class A+ effluent to the Roosevelt Irrigation District Groundwater Savings Facility. The LTSCs will be necessary to maintain the City's 100-year Assured Water Supply.
- Allowing the City to use Class A+ effluent, instead of groundwater, to irrigate Sundance Park. This will conserve groundwater.
- Allowing the City to recharge Class A+ effluent north of the Roosevelt Canal in the future.
- Potentially allowing local schools to irrigate turf with Class A+ effluent, instead of potable water. This has the potential to conserve potable water and reduce water bills for the schools.

The implementation schedule for discharging Class A+ effluent from the Central Buckeye WWTP to the Roosevelt Canal will be dependent on approval of the MAG 208 amendment and modification of the AZPDES permit for the Central Buckeye WWTP.

Modification of the AZPDES permit for the Sundance WRF is required before Class A+ effluent from the Sundance WRF can be discharged to the Roosevelt Canal. Because discharge of Class A+ effluent from the Sundance WRF to the Roosevelt Canal is already identified in the 208 Plan, the discharge of Sundance WRF effluent to the Roosevelt Canal may begin before effluent from the Central Buckeye WWTP is discharged to the Roosevelt Canal.

Sundance Park may be irrigated with effluent before effluent from either the Sundance WRF or Central Buckeye WWTP is discharged to the Roosevelt Canal. It is anticipated that construction of the effluent transmission main will be completed by December 31, 2015. Therefore, Sundance Park could be irrigated by Class A+ effluent from the Sundance WRF and Central Buckeye WWTP by early 2016.

Local school districts will be responsible for acquiring Approvals to Construct (ATCs) and Approvals of Construction (AOCs) from the MCESD to begin using the Class A+ effluent to irrigate their turf areas. In the event that discharge to the Roosevelt Canal or reuse options are not available, a contingency discharge may occur to the Buckeye Canal at Dean Road, about ¼-mile south of Southern Avenue. There will also be the option of discharging to a lateral of the Buckeye Canal near the Central Buckeye WWTP.

7.0 PUBLIC PARTICIPATION

MAG and the City will follow the applicable procedures for public notification in processing this 208 Plan Amendment, including the following:

- 1. Submittal of a mailing list used to notify the public of the hearing for this 208 Plan amendment.
- 2. Thirty-day public notice of the availability of the documents for review prior to the public hearing.
- 3. Publication of a public notice posting the date, time, subject and location of the public hearing for this 208 Plan amendment.
- 4. Submittal of an affidavit of the publication of the public notice.
- 5. Submittal of a responsiveness summary for the public hearing.

8.0 CHECKLIST AND MAPS

Please refer to Appendix B for the 208 Amendment Checklist.

Exhibits 1 through 8 are attached to this application. Exhibits 1 through 8 consist of the following maps or figures:

- Exhibit 1: Buckeye 208 Plan Proposed Water Reclamation Facilities and Service Areas (CMX, 2007). This figure was originally labeled Figure 10 and was included in the Town of Buckeye's MAG 208 Water Quality Management Plan Comprehensive Amendment (CMX, October 12, 2007).
- Exhibit 2: Buckeye Effluent Pipeline. This figure shows the proposed additional discharge point into the Roosevelt (RID) Canal. The adjacent Sundance WRF is also shown.
- **Exhibit 3**: Discharge Point for Sundance Water Reclamation Facility and Central Buckeye Wastewater Treatment Plant. This figure consists of an aerial photograph which shows the Sundance WRF and the proposed additional discharge point into the RID Canal.
- **Exhibit 4**: Sundance Wastewater Service Area and Central Buckeye Wastewater Service Area. The figure shows the wastewater service areas of the Central Buckeye WWTP and Sundance WRF, along with the City's Municipal Planning Area Boundary.
- Exhibit 5: Existing Conditions Map. This figure shows the existing effluent pipeline from the Sundance WRF to the Buckeye Canal, and the existing effluent pipeline from the Sundance WRF to the Sundance Golf Course.
- Exhibit 6: Future Effluent Customers. This figure shows some of the locations where use of the Class A+ effluent has been requested, including Sundance Park and various schools with turf areas.

- Exhibit 7: Central Buckeye Wastewater Treatment Plant to Sundance Water Reclamation Facility Effluent Line Alignment. This figure shows the route of the 12-inch effluent transmission main from the Central Buckeye WWTP to the Sundance WRF.
- **Exhibit 8**: Effluent Discharge and Reuse Options Schematic, Central Buckeye WWTP and Sundance WRF. This diagram illustrates potential discharge and reuse options.

9.0 REFERENCES

- CMX, 2007, City of Buckeye, Arizona, Maricopa Association of Governments (MAG) 208 Water Quality Management Plan Comprehensive Amendment (approved by the MAG Regional Council), 89 pages, with tables, figures and appendices.
- Maricopa Association of Governments (MAG), 2013, Socioeconomic Projections, June 2013, 115 pages, with tables, figures and appendices.
- Maricopa Association of Governments (MAG), 2014, 208 Water Quality Management Plan Point Source Update, Approved by the MAG Regional Council on June 25, 2014, 251 pages, with tables, figures and appendices.
- RBF Consulting, 2014, Design Concept Report, Central Buckeye WWTP to Sundance WRF, Prepared for City of Buckeye, Arizona, 34 pages, with tables, figures and appendices.

MAG 208 Amendment	Central Buckeye WWTP	AZDDES Discharge	Doints to Ro	ocavalt & Buckeye	Canal
IVIAG 200 AITIEHUITIEHL.	Cellulal buckeye www.r	ALP DES DISCHAIRE	Pullits to no	JUSEVEIL & DUCKEVE	z Carrais

FIGURES (EXHIBITS)

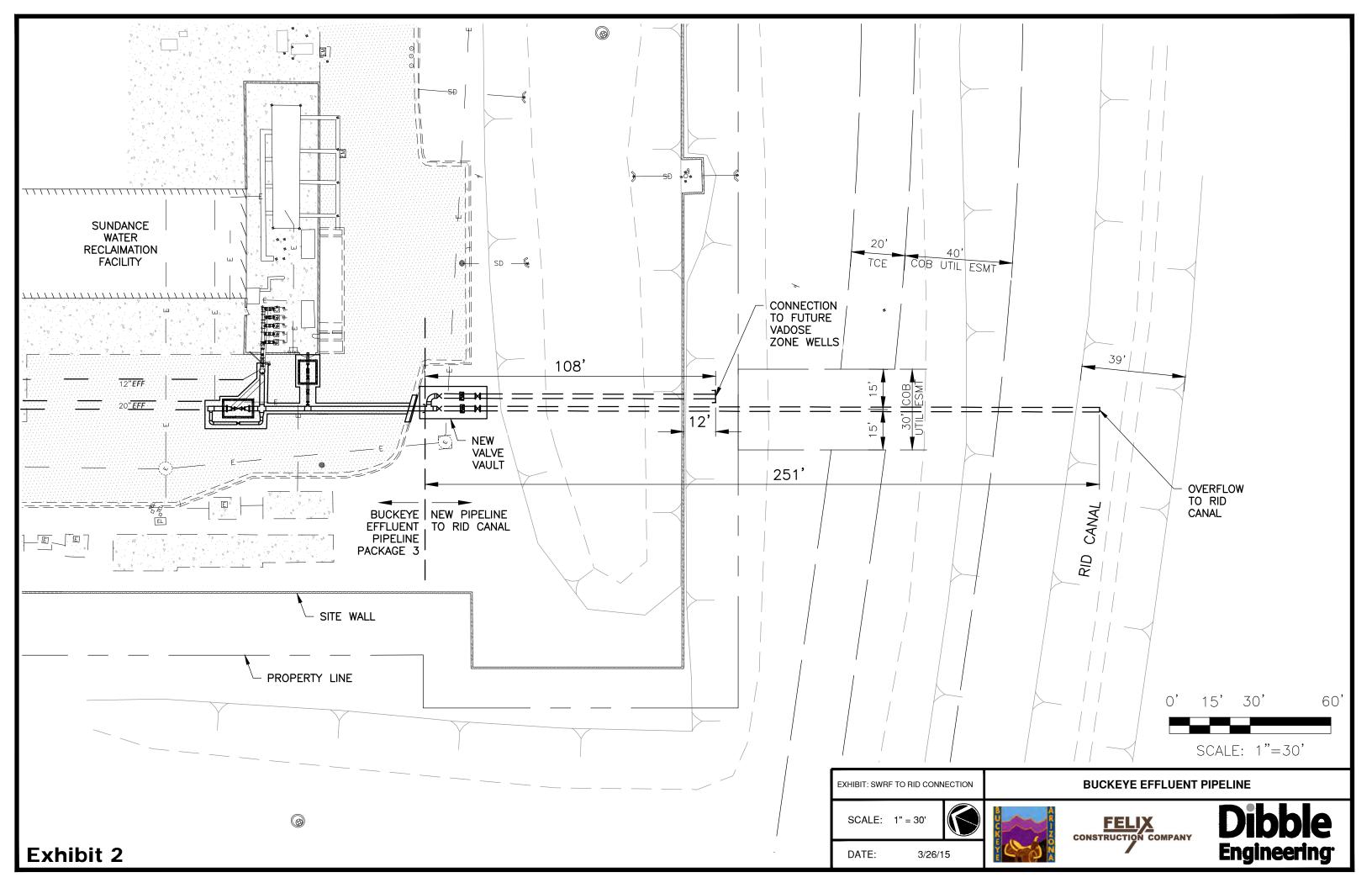
CMX PROJ: 7449 DATE: 07/02/07 SCALE 1:100,000 FIG NO. DRAWN: BNM APPROVED: SAL DESIGNED: SAL 10 SHT. 1 OF 1

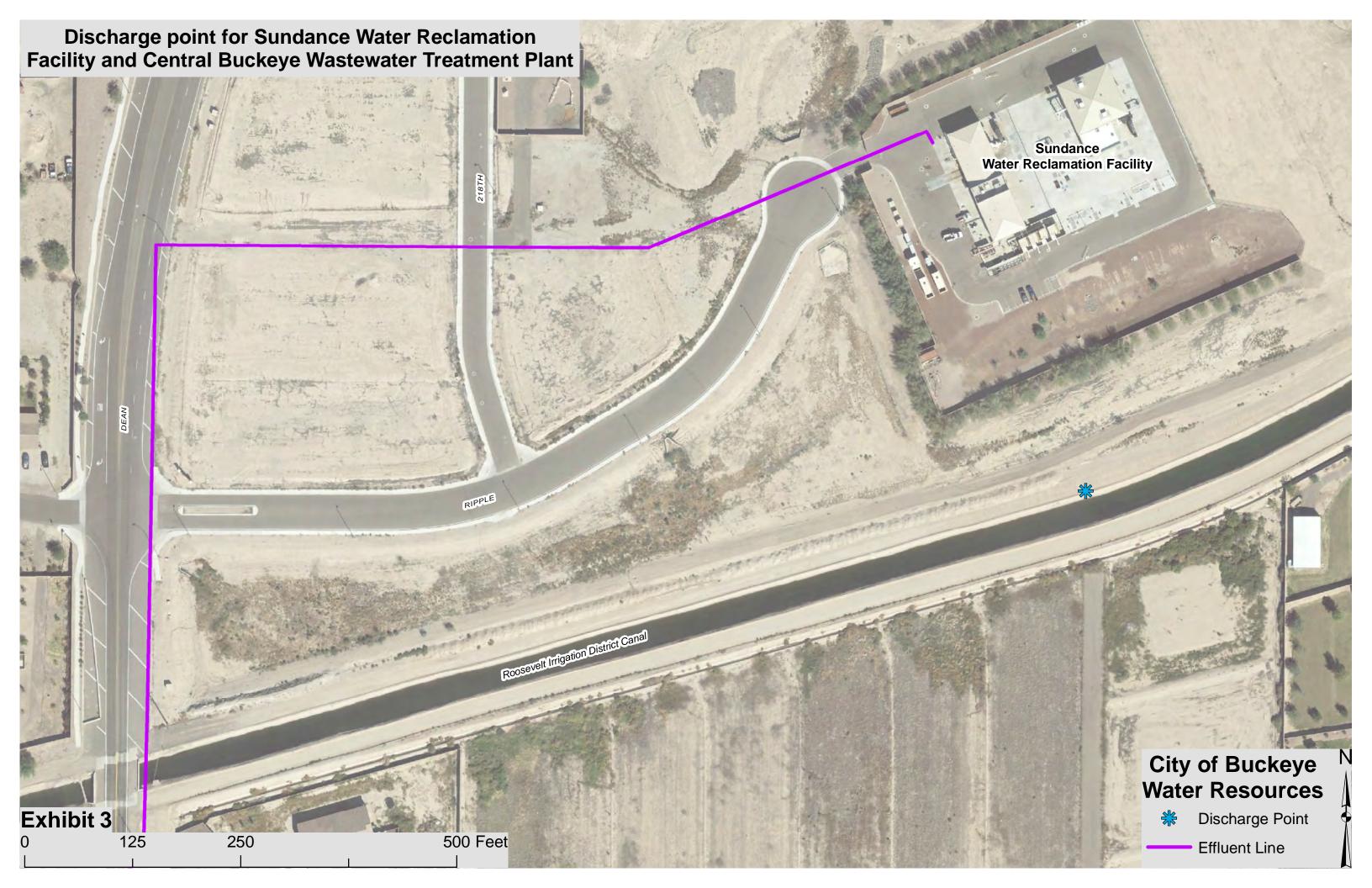
buckeye 208 lan Buckeye, Arizona

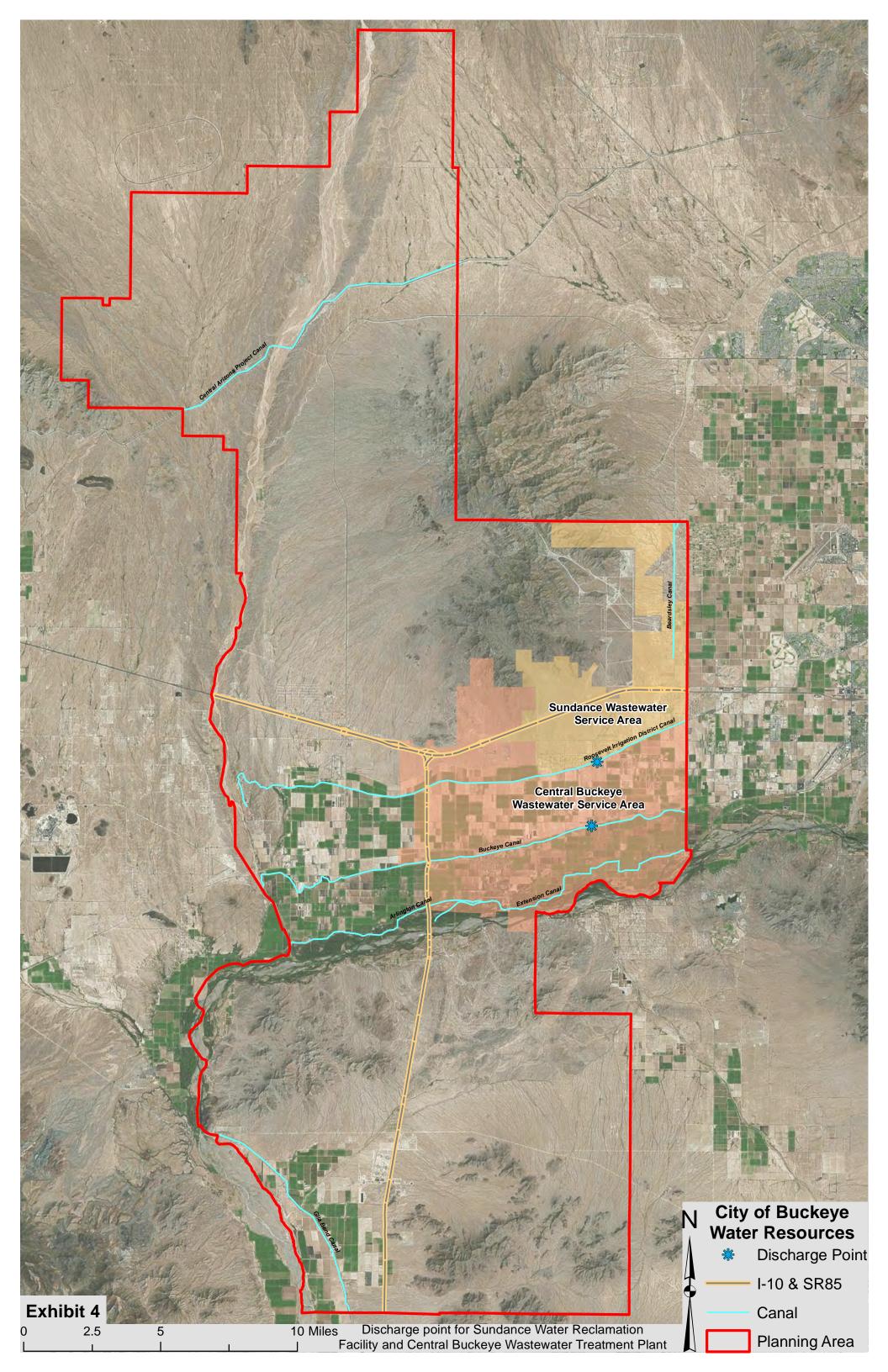
Proposed Water Reclamation Facilities and Service Areas

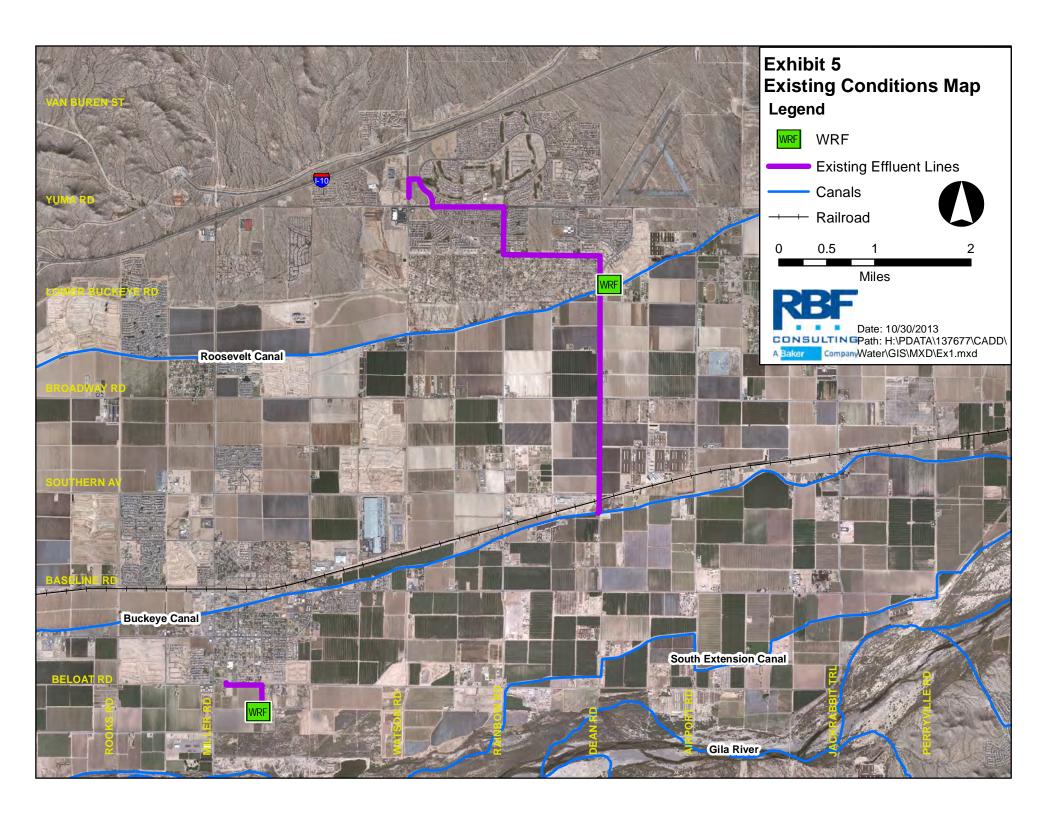


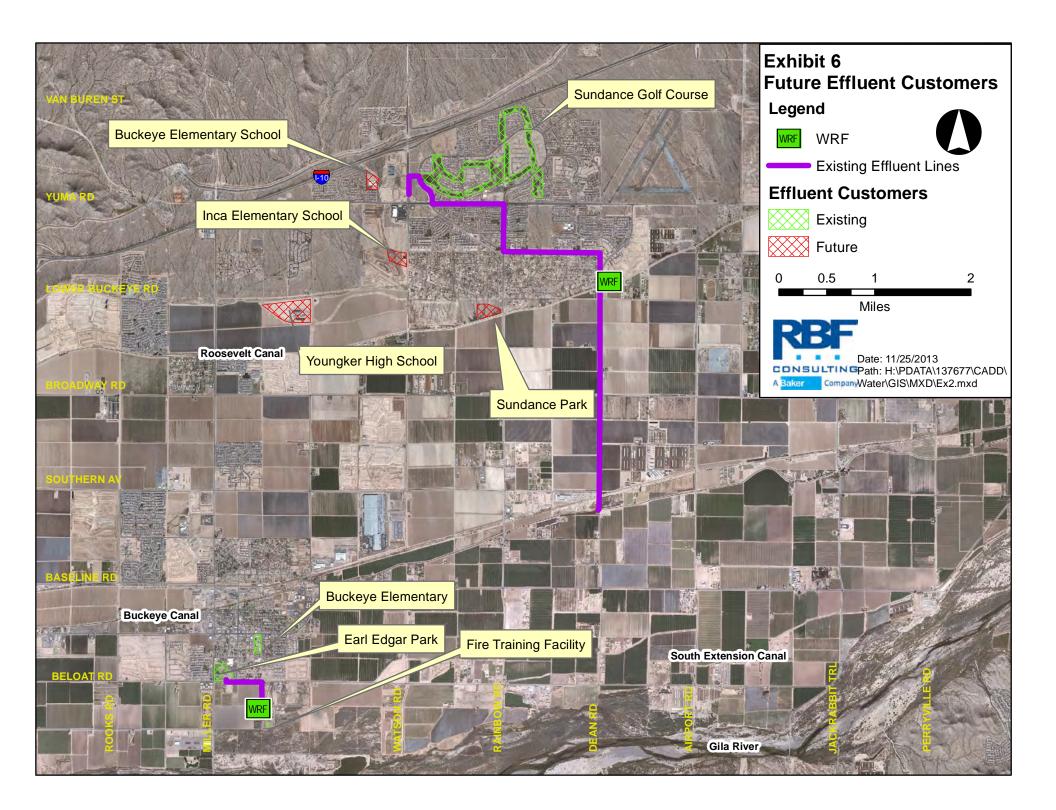
7740 N. 16TH ST. STE. 100 PHOENIX, AZ 85020 PHONE: (602) 567-1900 FAX: (602) 567-1901 www.cmxinc.com











Central Buckeye Wastewater Treatment Plant to Sundance Water Reclamation Facility EFFLUENT LINE ALIGNMENT



LEGEND

PROPOSED ALTERNATIVE: 12" PVC-C-900

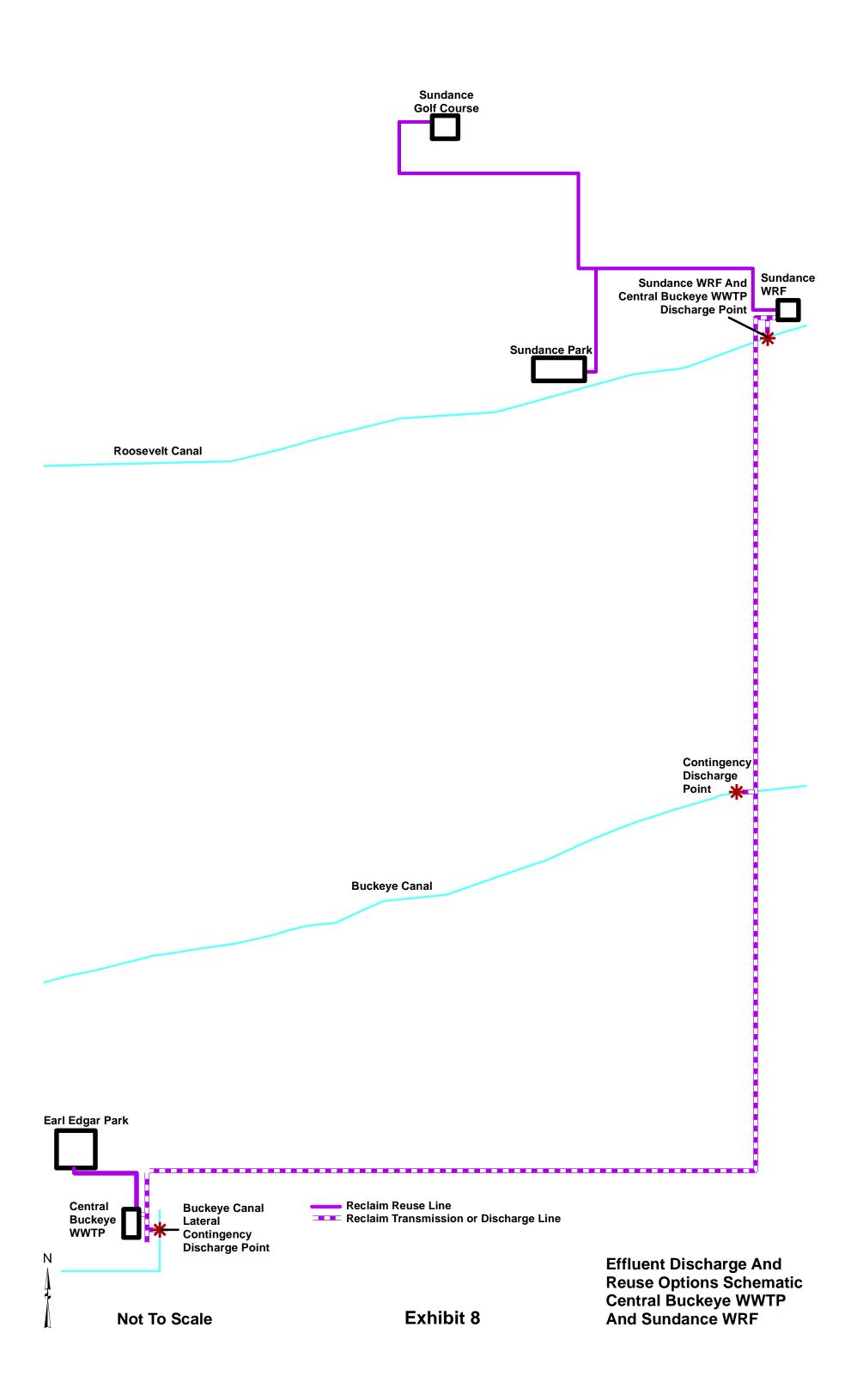
-- EXISTING 20" EFFLUENT TRANSMISSION LINE

EXISTING 12" EFFLUENT DISTRIBUTION LINE





PLANNING DESIGN CONSTRUCTION



APPENDIX A

LETTERS:

- Letter of Sponsorship from the City of Buckeye
- Letter from the Jurisdiction Within Three Miles (Maricopa County)
- Letter of Financial Capability from the City's Finance Director



September 14, 2015

Dennis Smith, Executive Director Maricopa Association of Governments 302 North 1st Avenue, Suite 300 Phoenix, Arizona 85003

Subject: MAG 208 Amendment for City of Buckeye, Arizona

Dear Mr. Smith:

The City of Buckeye is submitting an application for a 208 Amendment to the MAG 208 Water Quality Management Plan. In accordance with the MAG 208 Water Quality Management Plan, we are officially requesting that you initiate the amendment process for the proposed additional Arizona Pollutant Discharge Elimination System (AZPDES) discharge points from the Central Buckeye Wastewater Treatment Plant (WWTP).

The proposed additional discharge points are to the Roosevelt Irrigation District Canal and Buckeye Canal. The primary discharge will be to the Roosevelt Canal. In the event that discharge to the Roosevelt Canal or reuse is not available, a contingency discharge may occur to the Buckeye Canal at Dean Road, about ¼-mile south of Southern Avenue. There will also be the option of discharging to a lateral of the Buckeye Canal, near the Central Buckeye WWTP.

We look forward to working with you and appreciate your assistance to facilitate the MAG approval process for this 208 Amendment.

Sincerely,

Stephen Cleveland

City Manager

cc: Julie Hoffman, MAG Environmental Planning Program Manager



Maricopa County

September 8, 2015

Dennis Smith, Executive Director Maricopa Association of Governments 302 North 1st Avenue, Suite 300 Phoenix, Arizona 85003

Dear Mr. Smith:

Re:

MAG 208 Areawide Water Quality Management Plan Amendment Central Buckeye Wastewater Treatment Plant

Arizona Pollutant Discharge Elimination System Permit Discharges to the Roosevelt Canal and

Buckeye Canal

The City of Buckeye has submitted a proposed Plan Amendment to the MAG 208 Areawide Water Quality Management Plan dated July 30, 2015. The proposed Amendment is for additional Arizona Discharge Elimination System (AZPDES) discharge points from the Central Buckeye Wastewater Treatment Plant (WWTP).

The proposed Amendment is to allow additional discharge points to the Roosevelt Irrigation District Canal and the Buckeye Canal. The primary discharge will be to the Roosevelt Canal. In the event that discharge to the Roosevelt Canal or reuse is not available, a contingency discharge may occur to the Buckeye Canal at Dean Road, about one-fourth mile south of Southern Avenue. There will also be the option of discharging to a lateral of the Buckeye Canal near the Central Buckeye WWTP.

The document was submitted to the Maricopa County for review because the project is located within three miles of unincorporated areas of Maricopa County.

The proposed Amendment complies with the MAG 208 review and approval process under the MAG 208 Areawide Water Quality Management Plan. The project is not in conflict with Maricopa County plans for the area and it is acceptable.

Please note that the Maricopa County Environmental Services Department has not reviewed, nor approved the design of the facilities as part of the 208 review. Any technical issues that remain will need to be resolved during the design phase of the project. Approval to Construct (ATC) and Approval of Construction (AOC) must be obtained from the Maricopa County Environmental Services Department prior to start of construction and startup, respectively, of all treatment, discharge, recharge, and reuse facilities, including all conveyance facilities and final end user facilities.

Sincerely,

Tom Manos

County Manager

cc: Mr. Stephen Cleveland, City Manager, City of Buckeye

Mr. Ron Whitler, Hydrologist, Water Resources Department, City of Buckeye

Ms. Julie Hoffman, Environmental Planning Program Manager, MAG

Kevin Chadwick, Maricopa County Environmental Services Department



May 27, 2015

Julie Hoffman, Environmental Planning Program Manager Maricopa Association of Governments 302 North 1st Avenue, Suite 300 Phoenix, Arizona 85003

Subject:

Financial Capability for Reclaimed Water Line from Central Buckeye

Wastewater Treatment Plant to Roosevelt Canal

MAG 208 Water Quality Management Plan Amendment

City of Buckeye, Arizona

Dear Ms. Hoffman:

The purpose of this letter is to provide assurance that the City of Buckeye (City) has the financial capability to construct, operate and maintain a reclaimed water line from the Central Buckeye Wastewater Treatment Plant (WWTP) to the Sundance Water Reclamation Facility (WRF), including a discharge pipe to the Roosevelt Canal. The City is the owner and operator of the Central Buckeye WWTP and the Sundance WRF. The City is currently constructing the reclaimed water line from the Central Buckeye WWTP to the Sundance WRF.

The project is being financed by a loan secured from the Water Infrastructure Finance Authority of Arizona (WIFA). Revenue from sewer and reclaimed water rates and fees will be used to repay the WIFA loan. Operation and maintenance of the reclaimed water line and discharge pipe to the Roosevelt Canal will also be funded by sewer and reclaimed water rates and fees.

Sincerely,

Larry D. Price Finance Director

APPENDIX B 208 AMENDMENT CHECKLIST

Section 208 Clean Water Act, 40 CFR Part 130.6

REQUIREMENT	PROVIDE BRIEF SUMMARY OF HOW REQUIREMENTS ARE ADDRESSED	ADDRESSED ON PAGE:
AUTHORITY Proposed Designated Management Agency (DMA) shall self-certify that it has the authorities required by Section 208(c)(2) of the Clean Water Act to implement the plan for its proposed planning and service areas. Self-certification shall be in the form of a legal opinion by the DMA or entity attorney.	The City of Buckeye is the Designated Management Agency for the Buckeye Municipal Planning Area.	Page 1
20-YEAR NEEDS {Clearly describe the existing wastewater treatment (WWT) facilities:} Describe existing WWT facilities.	This proposed amendment applies to the existing Central Buckeye Wastewater Treatment Plant which is described in the MAG 208 Water Quality Management Plan. The Central Buckeye Wastewater Treatment Plant treats domestic and commercial wastewater to Class A+ standards. The current design capacity is 4.5 MGD. The plant is located one mile south of Buckeye City Hall, at 915 South 7 th Street, Buckeye, Arizona 85326.	Page 5 (Section 3.0).

Show WWT certified and service areas for private utilities and sanitary district boundaries if appropriate.	There are no private sewer utilities or sanitary districts within the area of this proposed amendment. Please refer to attached Exhibit 1 (CMX, 2007) from the Town of Buckeye's MAG 208 Water Quality Management Plan Comprehensive Amendment (October 12, 2007), and Exhibit 4.	Exhibits 1 and 4
{Clearly describe alternatives and the recommended WWT plan:} Provide POPTAC population estimates (or COG-approved estimates only where POPTAC not available) over 20-year period.	The Central Buckeye Wastewater Service Area is primarily located in Regional Analysis Zone (RAZ) 278 and a portion of RAZ 279. The population projected in 2040 for RAZ 278 and 279 is 84,828 and 62,737, respectively (MAG Socioeconomic Projections, June 2013).	Page 5 (Section 3.0).
Provide wastewater flow estimates over the 20-year planning period.	Buildout capacity for the Central Buckeye WWTP is 45.8 MGD.	Page 5 (Section 3.0).

Illustrate the WWT planning and service areas.	Please refer to attached Exhibit 1 (CMX, 2007) from the Town of Buckeye's MAG 208 Water Quality Management Plan Comprehensive Amendment (October 12, 2007), and Exhibit 4.	Exhibits 1 and 4
Describe the type and capacity of the recommended WWT Plant.	The current capacity of the Central Buckeye WWTP is 4.5 MGD. The Central Buckeye WWTP treats domestic and commercial wastewater to Class A+ standards. The treatment process includes influent pumping, mechanically and manually cleaned bar screens, grit removal, secondary treatment, (Bardenpha process for nitrification/denitrification), secondary clarification, tertiary filtration and chlorination/dechlorination.	Page 5 (Section 3.0).
Identify water quality problems, consider alternative control measures, and recommend solution for implementation.	No water quality issues are anticipated. Class A+ effluent is produced.	Not applicable

If private WWT utilities with certificated areas are within the proposed regional service area, define who (municipal or private utility) serves what area and when. Identify whose sewer lines can be approved in what areas and when?	Private WWT utilities are not within the area of this proposed amendment. The City of Buckeye provides sewer service for this area.	Not applicable. Exhibits 1 and 4.
Describe method of effluent disposal and reuse sites (if appropriate).	Additional discharge: to Roosevelt Irrigation District Canal (Groundwater Savings Facility), east of Dean Road. The effluent will be reused for irrigation, to reduce groundwater pumping. As a contingency, discharge may occur to the Buckeye Water Conservation and Drainage District's Buckeye Canal at a location on Dean Road, about ¼-mile south of Southern Avenue. The effluent disposal options for the Central Buckeye WWTP continue to include reuse, recharge and discharge to the Buckeye Water Conservation and Drainage District lateral of the Buckeye Canal.	Pages 1 through 4 (Sections 1.1.1 through 1.1.6). Exhibits 2, 3, 4 and 8.
If Sanitary Districts are within a proposed planning or service area, describe who serves the Sanitary Districts and when.	There are no Sanitary Districts within the service area or the planning area.	Not applicable. Exhibits 1 and 4.

Describe ownership of land proposed for plant sites and reuse areas.	The WWT plant sites are owned by the City of Buckeye. Land at the additional points of discharge is owned by Roosevelt Irrigation District and Buckeye Water Conservation and Drainage District. The additional reuse areas consist of irrigated lands within the Roosevelt Irrigation District (including the City of Buckeye Cemetery), and irrigated lands within the Buckeye Water Conservation and Drainage District.	Page 1 (Section 1.0), page 3 (Section 1.1.4), and page 5 (Section 3.0).
Address time frames in the development of the treatment works.	Construction of the reclaimed water line project is anticipated to be completed by December 31, 2015.	Page 6 (Section 6.0).
Address financial constraints in the development of the treatment works.	There are no financial constraints on the project proposed by this amendment.	Page 6 (Section 5.0).

Describe how discharges will comply with EPA municipal and industrial stormwater discharge regulations (Section 405, CWA).	Storm water pollution prevention will be achieved through an ADEQ storm water pollution prevention plan. Please refer to the Town of Buckeye's MAG 208 Water Quality Management Plan Comprehensive Amendment (October 12, 2007).	Page 6 (Section 4.0).
Describe how open areas & recreational opportunities will result from improved water quality and how those will be used.	Effluent discharged to the Roosevelt Canal can be used to irrigate parks within the Roosevelt Irrigation District. Sundance Park will be irrigated with effluent that is not discharged to the Roosevelt Canal. As a contingency, effluent may be discharged to the Buckeye Canal and used to irrigate non-edible crops or landscaping.	Pages 2 and 3 (Sections 1.1.2 and 1.1.4), and page 5 (Section 3.0).
Describe potential use of lands associated with treatment works and increased access to water-based recreation, if applicable.	Not applicable.	Not applicable.
REGULATIONS Describe types of permits needed, including NPDES, APP and reuse.	The existing AZPDES permit will be modified for the Central Buckeye WWTP. The APP will be modified as required. A Type 3 Reclaimed Water Agent permit has been obtained.	Page 6 (Section 4.0).

Describe restrictions on NPDES permits, if needed, for discharge and sludge disposal.	No restrictions exist for the current AZPDES permits and no restrictions apply to the proposed amendment.	Not applicable.
Provide documentation of communication with ADEQ Permitting Section 30 to 60 days prior to public hearing regarding the need for specific permits.	The ADEQ Permitting Section called the City of Buckeye on January 12, 2015. ADEQ determined that the AZPDES permit for the Central Buckeye WWTP needs to be modified to add the discharge to the Roosevelt Canal.	
Describe pretreatment requirements and method of adherence to requirements (Section 208 (b)(2)(D), CWA).	The Central Buckeye WWTP pretreatment requirements consist of grit removal and screening. The pretreatment requirements are met using mechanically- and manually-cleaned bar screens, and TeaCup cyclone grit separators.	Page 5 (Section 3.0).
Identify, if appropriate, specific pollutants that will be produced from excavations and procedures that will protect ground and surface water quality (Section 208(b)(2)(K) and Section 304, CWA).	Not applicable.	Not applicable.

Describe alternatives and recommendation in the disposition of sludge generated. (Section 405 CWA)	Sludge is dewatered and disposed of at an offsite, permitted landfill. Please refer to the Town of Buckeye's MAG 208 Water Quality Management Plan Comprehensive Amendment (October 12, 2007).	Not applicable for this amendment.
Define any nonpoint issues related to the proposed facility and outline procedures to control them.	Not applicable. Non-point discharges from the WWT plants are not anticipated.	Not applicable.
Describe process to handle all mining runoff, orphan sites and underground pollutants, if applicable.	Not applicable.	Not applicable.
If mining related, define where collection of pollutants has occurred, and what procedures are going to be initiated to contain contaminated areas.	Not applicable.	Not applicable.
If mining related, define what specialized procedures will be initiated for orphan sites, if applicable.	Not applicable.	Not applicable.
CONSTRUCTION Define construction priorities and time schedules for initiation and completion.	Construction of the reclaimed water line project was 62% complete as of July 16, 2015. The project is anticipated to be completed by December 31, 2015.	Page 6 (Section 6.0).

Identify agencies who will construct, operate and maintain the facilities and otherwise carry out the plan.	The City of Buckeye will construct, operate and maintain the facilities and carry out the plan.	Pages 6 and 7 (Section 6.0).
Identify construction activity-related sources of pollution and set forth procedures and methods to control, to the extent feasible, such sources.	Storm water pollution prevention is achieved through an ADEQ storm water pollution prevention plan. Dust control is achieved through a Maricopa County dust control block permit. Dust control is achieved using a water truck and trackout control.	Page 6 (Section 4.0).
FINANCING AND OTHER MEASURES NECESSARY TO CARRY OUT THE PLAN If plan proposes to take over certificated private utility, describe how, when and financing will be managed.	Not applicable. The plan is not proposing to take over a certified private utility.	Not applicable.

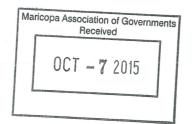
Describe any significant measure necessary to carry out the plan, e.g., institutional, financial, economic, etc.	The reclaimed water line project is currently being constructed. Financing to construct the reclaimed water line project has been approved by the City Council. The project is being financed by a WIFA loan with repayment through sewer and reclaimed water rates and fees. Operation and maintenance will be funded by sewer and reclaimed water rates and fees.	Pages 6 and 7 (Sections 5.0 and 6.0).
Describe proposed method(s) of community financing.	Financing to construct the reclaimed water line project has been approved by the City Council. The project is being financed by a WIFA loan with repayment through sewer and reclaimed water rates and fees.	Page 6 (Section 5.0). Also see financial capability letter in Appendix A.

CENTRAL BUCKETE WAS	T	1
Provide financial information to assure DMA has financial capability to operate and maintain wastewater system over its useful life.	Operation and maintenance of the reclaimed water line and additional discharge points will be funded by sewer and reclaimed water rates and fees.	Page 6 (Section 5.0). Also see financial capability letter in Appendix A.
	Please refer to the Town of Buckeye's MAG 208 Water Quality Management Plan Comprehensive Amendment (October 12, 2007) for funding to operate and maintain the wastewater treatment plants.	
Provide a time line outlining period of time necessary for carrying out plan implementation.	Construction of the reclaimed water line project is anticipated to be completed by December 31, 2015.	Page 6 (Section 6.0).

Provide financial information indicating the method and measures necessary to achieve project financing. (Section 201 CWA or Section 604 may apply.)	Financing to construct the reclaimed water line project has been approved by the City Council. The project is being financed by a WIFA loan with payback through reclaimed water and sewer rates.	Page 6 (Section 5.0). Also see financial capability letter in Appendix A.
IMPLEMENTABILITY Describe impacts and implementability of Plan: Describe impacts on existing wastewater (WW) facilities, e.g., Sanitary district, infrastructure/facilities and certificated areas.	Operation of the reclaimed water line and additional points of discharge is not expected to impact any adjacent municipalities, businesses, communities, sanitary districts or private wastewater providers with certified areas.	Page 6 (Section 6.0).
Describe how and when existing package plants will be connected to a regional system.	Not applicable.	Not applicable.
Describe the impact on communities and businesses affected by the plan.	Operation of the reclaimed water line and additional discharge points is not expected to impact any communities and businesses.	Not applicable.

If a municipal wastewater (WWT) system is proposed, describe how WWT service will be provided until the municipal system is completed: i.e., will package plants and septic systems be allowed and under what circumstances. (Interim services).	Not applicable. The existing Central Buckeye WWTP and Sundance WRF will remain in operation during any future expansion.	Not applicable.
PUBLIC PARTICIPATION Submit copy of mailing list used to notify the public of the public hearing on the 208 amendment. (40 CFR, Chapter 1, Part 25.5)	Public participation requirements will be satisfied through MAG.	Pages 7 and 8 (Section 7.0).
List location where documents are available for review at least 30 days before public hearing.	Public participation requirements will be satisfied through MAG.	Pages 7 and 8 (Section 7.0).
Submit copy of the public notice of the public hearing as well as an official affidavit of publication from the area newspaper. Clearly show the announcement appeared in the newspaper at least 45 days before the hearing.	Public participation requirements will be satisfied through MAG.	Pages 7 and 8 (Section 7.0).
Submit affidavit of publication for official newspaper publication.	Public participation requirements will be satisfied through MAG.	Pages 7 and 8 (Section 7.0).

Submit responsiveness summary for public hearing.	Public participation requirements will be satisfied through MAG.	Pages 7 and 8 (Section 7.0).



THE ARIZONA REPUBLIC

STATE OF ARIZONA COUNTY OF MARICOPA

Manuel Vargas, being first duly sworn, upon oath deposes and says: That he is a legal advertising representative of the Arizona Business Gazette, a newspaper of general circulation in the county of Maricopa, State of Arizona, published at Phoenix, Arizona, by Phoenix Newspapers Inc., which also publishes The Arizona Republic, and that the copy hereto attached is a true copy of the advertisement published in the said paper on the dates as indicated.

The Arizona Republic

October 3, 2015

Sworn to before me this 5TH day of October A.D. 2015





PUBLIC HEARING ON THE DRAFT MAG 208 WATER OLALITY MANAGEMENT PLAN AMENDMENT FOR THE CENTRAL BUCKEYE WASTEWATER TREATMENT PLANT ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DISCHARGES TO THE ROOSEVELT CANAL AND BUCKEYE CANAL TUESDAY, November 17, 2015 at 3:00 p.m. MAG Office, Suite 200 - Sayuaro Room

MAG Office, Suite 200 - Sa-guaro Room 302 N. 1st Ave, Phoenix, Arizona 85003 The Maricopa Association of Governments (MAG) will conduct a public hearing on the Draft MAG 208 Water Juality Management Plan Amendment for the Central Suckeye Wastewater Treat-ment Plant Arizona Politicant Discharge Eliminaluio system (AZPDES) Permit

Discharges to the Roosevelt Canal and Buckeye Canal. The purpose of the hearing is to receive public comment on the draft amendment. The Central Buckeye Wastewater Treatment Plant is identified in the MAG 208 Plan with an ultimate capacity of 458 million gallons per day. Reclaimed water is per day. Reclaimed water is consistent of the public per day for the public per day for the public per day for a per dutificial AZPUES Fermin discharge points, the methods of effluent disposal currently identified in the MAG 208 Plan for the facility will continue to remain options. Following consideration of comments received, it is anticipated that the MAG Water Quality Advisory Commence and Comments of the MAG Regional Council. The MAG Regional Council is anticipated that the Regional Council is anticipated that the Regional Council is anticipated that the Regional Council for the MAG Regional Council is anticipated that the Regional Council for the MAG Regional Council for the MAG Regional Council for the MAG Regional Council may take action on the Draft 208 pad advisory of the MAG Regional Council for public review at the MAG Office from 8:00 a.m. to 5:00 p.m. Monday through Friday, and on the MAG website at www.azma g.gov under Water Quality Management Planning by October 15, 2015. Copies Wanagement Planning by October 15, 2015. Copies will also available for review at the Glendale Public Library, 5959 W. Brown St; Mesa Public Library, 64 E. First St; and Phoenix Burton Barr Central Library, 1221 N. Central Ave. Public comments are welcome at the hearing, or may be submitted in writing by 3:00 p.m. on November 17, 2015, p.m. Julie Hoffman, MAG St., 2015 4:44-80 plot of the MAG Regional St. Ave. Suite 3:00 phoenix, AZ 850:00 plot of the MAG Regional St. Ave. Suite 3:00 phoenix, AZ 850:00 plot of the MAG Regional St. Suite 3:00 phoenix, AZ 850:00 plot of the MAG Regional St. Suite 3:00 phoenix, AZ 850:00 plot of the MAG Regional St. Suite 3:00 phoenix AZ 850:00 plot of the MAG Regional St. Suite 3:00 plot of the MAG Regional St.



302 North 1st Avenue, Suite 300 ▲ Phoenix, Arizona 85003 Phone (602) 254-6300 ▲ FAX (602) 254-6490 E-mail: mag@azmag.gov ▲ Web site: www.azmag.gov

October 8, 2015

TO:

Interested Parties for Water Quality

FROM:

Julie Hoffman, Environmental Planning Program Manager

SUBJECT:

PUBLIC HEARING ON THE DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT FOR THE CENTRAL BUCKEYE WASTEWATER TREATMENT PLANT ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DISCHARGES

TO THE ROOSEVELT CANAL AND BUCKEYE CANAL

Public Hearing

November 17, 2015 at 3:00 p.m. MAG Office, Saguaro Room

302 North 1st Avenue, Second Floor

Phoenix, Arizona 85003

The Maricopa Association of Governments (MAG) will conduct a public hearing on the Draft MAG 208 Water Quality Management Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System (AZPDES) Permit Discharges to the Roosevelt Canal and Buckeye Canal. The purpose of the hearing is to receive public comment on the draft plan amendment.

The Central Buckeye Wastewater Treatment Plant is identified in the MAG 208 Plan with an ultimate capacity of 45.8 million gallons per day. Reclaimed water is currently disposed of through reuse and an AZPDES Permit discharge to a lateral of the Buckeye Canal located near the facility. This amendment would identify additional AZPDES Permit discharge points to the Roosevelt Canal and Buckeye Canal. Although this amendment includes additional AZPDES Permit discharge points, the methods of effluent disposal currently identified in the MAG 208 Plan for the facility will continue to remain options.

For your information and convenience, a copy of the public hearing notice is enclosed. The draft document will be available for public review at the MAG Offices, third floor, from 8:00 a.m. to 5:00 p.m. Monday through Friday, and on the MAG website at www.azmag.gov under Water Quality Management Planning by October 15, 2015. Copies will also be available for review at the Glendale Public Library, 5959 W. Brown Street; Mesa Public Library, 64 E. First Street; and Phoenix Burton Barr Central Public Library, 1221 N. Central Avenue. For further information or to submit written comments on the draft document prior to the hearing, please contact me at (602) 254-6300.

PUBLIC HEARING ON THE DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT FOR THE CENTRAL BUCKEYE WASTEWATER TREATMENT PLANT ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DISCHARGES TO THE ROOSEVELT CANAL AND BUCKEYE CANAL

Tuesday, November 17, 2015 at 3:00 p.m. MAG Office, Suite 200 – Saguaro Room 302 N. Ist Ave. Phoenix, Arizona 85003

The Maricopa Association of Governments (MAG) will conduct a public hearing on the Draft MAG 208 Water Quality Management Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System (AZPDES) Permit Discharges to the Roosevelt Canal and Buckeye Canal. The purpose of the hearing is to receive public comment on the draft amendment.

The Central Buckeye Wastewater Treatment Plant is identified in the MAG 208 Plan with an ultimate capacity of 45.8 million gallons per day. Reclaimed water is currently disposed of through reuse and an AZPDES Permit discharge to a lateral of the Buckeye Canal located near the facility. This amendment would identify additional AZPDES Permit discharge points to the Roosevelt Canal and Buckeye Canal. Although this amendment includes additional AZPDES Permit discharge points, the methods of effluent disposal currently identified in the MAG 208 Plan for the facility will continue to remain options.

Following consideration of comments received, it is anticipated that the MAG Water Quality Advisory Committee may make a recommendation to the MAG Management Committee on November 17, 2015. On November 18, 2015, the Management Committee may make a recommendation to the MAG Regional Council. It is anticipated that the Regional Council may take action on the Draft 208 Plan Amendment on December 16, 2015.

The draft document will be available for public review at the MAG Office from 8:00 a.m. to 5:00 p.m. Monday through Friday, and on the MAG website at www.azmag.gov under Water Quality Management Planning by October 15, 2015. Copies will also be available for review at the Glendale Public Library, 5959 W. Brown St.; Mesa Public Library, 64 E. First St.; and Phoenix Burton Barr Central Library, 1221 N. Central Ave. Public comments are welcome at the hearing, or may be submitted in writing by 3:00 p.m. on November 17, 2015, to:

Julie Hoffman, MAG 302 N. Ist Ave., Suite 300 Phoenix, AZ 85003 Fax: (602) 254-6490 jhoffman@azmag.gov



302 North 1st Avenue, Suite 300 ▲ Phoenix, Arizona 85003 Phone (602) 254-6300 ▲ FAX (602) 254-6490 E-mail: mag@azmag.gov ▲ Web site: www.azmag.gov

October 8, 2015

Ms. Cynthia Zwick Director Arizona Community Action Association 2700 North 3rd Street, Suite 3040 Phoenix, AZ 85004-1122

Dear Ms. Zwick:

You are cordially invited to a public hearing on the Draft MAG 208 Water Quality Management Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System (AZPDES) Permit Discharges to the Roosevelt Canal and Buckeye Canal. The hearing will be held on Tuesday, November 17, 2015 at 3:00 p.m. in the Saguaro Room at the MAG Offices, 302 North 1st Avenue, Second Floor, Phoenix, Arizona 85003. The purpose of this hearing is to receive public comments. Written and verbal comments are welcomed at the public hearing. After considering public comments, the MAG Regional Council may take action on the amendment on December 16, 2015.

The Central Buckeye Wastewater Treatment Plant is identified in the MAG 208 Plan with an ultimate capacity of 45.8 million gallons per day. Reclaimed water is currently disposed of through reuse and an AZPDES Permit discharge to a lateral of the Buckeye Canal located near the facility. This amendment would identify additional AZPDES Permit discharge points to the Roosevelt Canal and Buckeye Canal. Although this amendment includes additional AZPDES Permit discharge points, the methods of effluent disposal currently identified in the MAG 208 Plan for the facility will continue to remain options.

The draft document will be available for public review at the MAG Offices, third floor, from 8:00 a.m. to 5:00 p.m. Monday through Friday, and on the MAG website at www.azmag.gov under Water Quality Management Planning by October 15, 2015. Copies will also available for review at the Glendale Public Library, 5959 W. Brown Street; Mesa Public Library, 64 E. First Street; and Phoenix Burton Barr Central Public Library, 1221 N. Central Avenue. We hope to see you or your representative at the hearing and to include your input in future planning efforts. For your convenience, a copy of the public hearing notice is attached. If you have any questions, please do not hesitate to contact me at (602) 254-6300.

Sincerely,

Julie Hoffman

Environmental Planning Program Manager

Attachment

A Voluntary Association of Local Governments in the Maricopa Region

PUBLIC HEARING ON THE DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT FOR THE CENTRAL BUCKEYE WASTEWATER TREATMENT PLANT ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DISCHARGES TO THE ROOSEVELT CANAL AND BUCKEYE CANAL

Tuesday, November 17, 2015 at 3:00 p.m. MAG Office, Suite 200 – Saguaro Room 302 N. Ist Ave.

Phoenix, Arizona 85003

The Maricopa Association of Governments (MAG) will conduct a public hearing on the Draft MAG 208 Water Quality Management Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System (AZPDES) Permit Discharges to the Roosevelt Canal and Buckeye Canal. The purpose of the hearing is to receive public comment on the draft amendment.

The Central Buckeye Wastewater Treatment Plant is identified in the MAG 208 Plan with an ultimate capacity of 45.8 million gallons per day. Reclaimed water is currently disposed of through reuse and an AZPDES Permit discharge to a lateral of the Buckeye Canal located near the facility. This amendment would identify additional AZPDES Permit discharge points to the Roosevelt Canal and Buckeye Canal. Although this amendment includes additional AZPDES Permit discharge points, the methods of effluent disposal currently identified in the MAG 208 Plan for the facility will continue to remain options.

Following consideration of comments received, it is anticipated that the MAG Water Quality Advisory Committee may make a recommendation to the MAG Management Committee on November 17, 2015. On November 18, 2015, the Management Committee may make a recommendation to the MAG Regional Council. It is anticipated that the Regional Council may take action on the Draft 208 Plan Amendment on December 16, 2015.

The draft document will be available for public review at the MAG Office from 8:00 a.m. to 5:00 p.m. Monday through Friday, and on the MAG website at www.azmag.gov under Water Quality Management Planning by October 15, 2015. Copies will also be available for review at the Glendale Public Library, 5959 W. Brown St.; Mesa Public Library, 64 E. First St.; and Phoenix Burton Barr Central Library, 1221 N. Central Ave. Public comments are welcome at the hearing, or may be submitted in writing by 3:00 p.m. on November 17, 2015, to:

Julie Hoffman, MAG 302 N. Ist Ave., Suite 300 Phoenix, AZ 85003 Fax: (602) 254-6490 jhoffman@azmag.gov Public Hearing on the Draft MAG 208 Water Quality

Management Plan Amendment for the Central Buckeye

Wastewater Treatment Plant Arizona Pollutant Discharge

Elimination System Permit Discharges to the Roosevelt

Canal and Buckeye Canal

Phoenix, Arizona November 17, 2015

3:02 p.m.

PREPARED FOR:
MARICOPA ASSOCIATION OF
GOVERNMENTS
(ORIGINAL)

REPORTED BY:

Debora Mitchell

Arizona CCR No. 50768

AZ Registered Reporting Firm No. R1008



Ottmar & Associates, Inc.
Court Reporters/Videoconference/Transcription
3770 N. 7th Street, Suite150
Phoenix, AZ 85014
T 602.485.1488
scheduling@ottmarassoc.com

Quality Management Plan Amendment for the Central
Buckeye Wastewater Treatment Plant Arizona Pollutant
Discharge Elimination System Permit Discharges to
the Roosevelt Canal and Buckeye Canal, taken on
November 17, 2015, commencing at 3:02 p.m., at MARICOPA
ASSOCIATION OF GOVERNMENTS, 302 North First Avenue,

Suite 200, Phoenix, Arizona, before Debora Mitchell, an

Arizona Certified Reporter, in and for the County of

PUBLIC HEARING on the Draft MAG 208 Water

COMMITTEE MEMBERS ATTENDING

Maricopa, State of Arizona.

Randy Gottler, Phoenix, Chair
Barbara Chappell, Avondale, Vice Chair
Roger Klingler for Arnold Coronado, Buckeye
Anupa Jain, Chandler
Mark Horn, Gilbert
Megan Sheldon, Glendale
Daniel Cleavenger, Mesa
Michael Weber, Peoria
Greg Homol, Queen Creek
Reyes Medrano for Mark Berrelez, Tolleson
Kevin Chadwick, Maricopa County
Jim Kudlinski, Salt River Project
Elisabeth Kahn for Glenn Stark, Gila River Indian
Community
Ray Jones, Water Utilities Association of Arizona

COMMITTEE MEMBERS ATTENDING BY TELEPHONE CONFERENCE CALL

Javier Setovich for Mark Seamans, Goodyear Terry Lowe, Surprise Michael Byrd, Salt River Pima-Maricopa Indian Community

OTHERS PRESENT

Julie Hoffman, Maricopa Association of Governments Kara Johnson, Maricopa Association of Governments Scott Miller, Arizona Public Service Ron Whitler, Buckeye

MR. GOTTLER: All right, what we are here for. The next item on the agenda is an open public hearing on the Draft MAG 208 Water Quality Management Plan Amendment for the Central Buckeye Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharges to the Roosevelt and Buckeye Canals.

We are going to begin this briefing on the draft amendment, but I want everyone to know we have a court reporter here to record these minutes so we have an official record. And written comments, if you have them, are welcome. Just recognize that if you have comments or questions, the City will have to answer those. And with that, I will introduce Ron Whitler.

MR. WHITLER: Thank you, everyone, for attending. We appreciate your support. We appreciate you taking the time to consider our amendment.

The purpose of the amendment is to add an additional -- add two additional AZPDES discharge points for the Central Buckeye Wastewater Treatment Plant. The plant currently discharges Class A+ effluent to a lateral of the Buckeye Canal, which is located adjacent to the Central Buckeye Wastewater Treatment Plant. We would like to add two additional discharge points. One will enable discharge of

Class A+ effluent to the Roosevelt Canal, and the other will allow discharge as a contingency to the main Buckeye Canal. So that will give us three options.

I will give you a description of some of the cross streets in the area so you can picture where the discharge points will be. The current discharge adjacent to the Central Buckeye Wastewater Treatment Plant is located between Miller Road and Apache Road on the west and east, and between Beloat Road on the north and the Gila River on of the south. It is actually about a quarter mile south of Beloat Road.

The proposed discharge to the Roosevelt Canal is located adjacent to the Sundance Water Reclamation Facility, which is also owned and operated by the City of Buckeye. That plant also produces Class A+ effluent. The location of that discharge to the Roosevelt Canal will be north of Lower Buckeye Road and east of Dean Road. The proposed contingency discharge to the main Buckeye Canal will be located near Dean Road about a quarter mile south of Southern Avenue.

I will give you a few facts. The current design capacity of the Central Buckeye Wastewater

Treatment Plant is 4.5 MGD. In 2014, we discharged a daily average of 1.1 MGD. The ultimate design buildout projection is 45.8 MGD for the plant. I will get

started with the slide show.

The project is located entirely within Buckeye's Municipal Planning Area. Portions are within Buckeye's incorporated area, and it is entirely within Buckeye's sewer service areas. The only jurisdiction within three miles, except the City of Buckeye, is unincorporated Maricopa County. A letter of no conflict was received from Maricopa County.

The purpose of the amendment is to add additional AZPDES discharge points for the Central Buckeye Wastewater Treatment Plant to the Roosevelt Canal and to the Buckeye Canal, which would be for a contingency discharge. The amendment will not result in a change in flow, which is currently 1.1 MGD. The amendment will not result in a change in treatment processes. It will still be Class A+ effluent that is discharged.

Recently, ADEQ, the Arizona Department of Environmental Quality, evaluated total maximum daily loads for boron and selenium on the middle Gila River.

Boron and selenium concentrations from the Central Buckeye Wastewater Treatment Plant and Sundance Water Reclamation Facility were considered during ADEQ's evaluation.

Why does Buckeye need this project?

Currently 90 percent of the effluent from the Central Buckeye Wastewater Treatment Plant is discharged without benefit to the City. And that is because the plant is located within the Buckeye waterlogged area. In December 2011, the depth to groundwater at the plant was three feet, so we had to install dewatering wells to keep the groundwater levels below manholes and electrical duct banks. We need to convey the effluent out of the Buckeye waterlogged area to areas where we can reuse it and eventually recharge it. We can't recharge anywhere near the plant due to the shallow groundwater levels.

The benefits of this project, it will convey Class A+ effluent to the Roosevelt Canal. The Roosevelt Canal was permitted as a groundwater savings facility. By sending effluent to the Roosevelt Canal groundwater savings facility, they can use the effluent for nonedible crops and landscape irrigation. And in turn, the City of Buckeye can receive long-term storage credits that are needed to maintain an assured water supply.

Also this project involves the construction of a 12-inch diameter effluent pipeline. Building the pipeline to get it up to the Roosevelt Canal will also allow us to get it to Sundance Park

where we can use the effluent for turf irrigation instead of potable groundwater.

I will back up. Also eventually we would like to build a recharge facility north of the Roosevelt Canal. We've met with the Arizona Department of Water Resources, and they are not comfortable with us building a recharge facility anywhere south of the Roosevelt Canal because it is too close to the Buckeye waterlogged area. But they have a level of comfort with us building one north of the Roosevelt Canal. So the goal of this whole project is to pipe the effluent to a location where we can reuse it, get some long-term storage credits, and eventually recharge it.

An additional benefit is, since this project will allow us to reuse more of the effluent, less of the effluent will be discharged to the Gila River.

The project is being financed by a WIFA loan. Repayment will be from sewer and reclaimed water rates and fees.

Here are a few maps. This map shows

Buckeye's Municipal Planning Area. The project is
entirely within Buckeye's Municipal Planning Area. You
can see that asterisk is the Central Buckeye Wastewater
Treatment Plant, and the Sundance Water Reclamation

Facility is located up there on the Roosevelt Canal.

This is the main Buckeye Canal, and then the Gila River is down here just south of the Central Buckeye

Wastewater Treatment Plant.

This map also shows Buckeye's Municipal Planning Area, the red or orange boundary. But it only shows the sewer service areas for the Central Buckeye Wastewater Treatment Plant and the Sundance Water Reclamation Facility.

This asterisk is the proposed discharge point along the main Buckeye Canal. This would be for a contingency discharge. And this asterisk shows the primary discharge point on the Roosevelt Canal.

This exhibit shows the effluent pipeline in purple. It will cross under the Roosevelt Canal, which you can see on the south side, and then work its way up to the Sundance Water Reclamation Facility.

That portion of the pipeline is already constructed, and you can see the asterisk on the Roosevelt Canal.

That is the proposed discharge point. The City has yet to build a pipeline across to the discharge point. We hope to accomplish that soon.

This figure shows the entire pipeline.

The portion in blue is newly constructed. The portion in red was already in existence because the Sundance

Water Reclamation Facility discharged to the main Buckeye Canal. So we built a new portion of the pipeline, and then we will push the effluent north up to the Roosevelt Canal.

You can see this circle here, the Central Buckeye Wastewater Treatment Plant is located within that circle. And the Sundance Water Reclamation

Facility is located within that circle. The Buckeye waterlogged area is down in this area. And this is a schematic that shows the current reuse locations. And the proposed pipeline route is dashed, and the existing darker purple lines are existing lines.

Currently effluent from the Central
Buckeye Wastewater Treatment Plant, a small amount goes
to Earl Edgar Park, and some is used at the fire
training facility adjacent to the Central Buckeye
Wastewater Treatment Plant. But 90 percent of the
effluent is currently discharged without benefit to the
City.

The pipeline will trans east along Beloat Road and then north along Dean Road, and this is the contingency discharge point to the Buckeye Canal. And then the line will continue up north to near the Sundance Water Reclamation Facility where it will be discharged to the Roosevelt Canal. This is Sundance

1 Park where the effluent can be reused. This is the Sundance Golf Course where the effluent is currently 2 3 reused from the Sundance plant. 4 Are there any questions? Okay. At this time public 5 MR. GOTTLER: comments are invited on the Draft 208 Amendment. 6 7 just want to remind people of a couple of things: one, if you are with the public and you wish to comment, we 8 9 will need those cards filled out prior to your The second is a reminder for the committee 10 comments. that an opportunity for questions and discussions on 11 12 the draft amendment were provided under the next item. 13 So with that, does anybody have any questions? 14 Thank you. 15 MR. WHITLER: Thank you very much. MAG appreciates everyone's 16 MR. GOTTLER: 17 interest in this, and we are glad you are here, and at 18 this time we would like to close the hearing and 19 request that the court reporter end transcription. Thank you. 20 21 (Conclusion of public hearing at 22 3:17 p.m.) 23 24 25

STATE OF ARIZONA)

COUNTY OF MARICOPA)

BE IT KNOWN that the foregoing proceedings were taken before me; that the foregoing proceedings were taken down by me using the voice writing method and translated into text via speech recognition under my direction; and that the foregoing typewritten pages are a full, true, and accurate transcript of all proceedings, all done to the best of my ability.

I CERTIFY that I am in no way related to any of the parties hereto, nor am I in any way interested in the outcome hereof.

- [] Review and signature was requested.
- [] Review and signature was waived.
- [X] Review and signature not required.

I CERTIFY that I have complied with the ethical obligations set forth in ACJA 7-206(F)(3) and ACJA (J)(1)(g)(1) and (2). Dated at Phoenix, Arizona, this 18th day of November, 2015.

Debu Witchel

Debora Mitchell
AZ Certified Reporter No. 50768

I CERTIFY that OTTMAR & ASSOCIATES, INC., has complied with the ethical obligations set forth in ACJA 7-206(J)(1)(g)(1) through (6).

Julie V. Ellmar

OTTMAR & ASSOCIATES, INC.
AZ Registered Reporting Firm No. R1008