



Environmental Planning Committee

(EPC) Meeting Agenda

DATE:	October 10, 2024
TIME:	10:00 a.m.
VIRTUAL MEETING:	ZOOM Webinar – https://us02web.zoom.us/j/89163926946?pwd=ZUK6kduA86rCBObtKWipekDbZBJvdY.1
LOCATION:	CAG Conference Room 2540 West Apache Trail, Suite 108, Apache Junction, Arizona 85120
ID NO:	891 6392 6946
PASSWORD:	987024
CALL-IN #:	1-(888) 475 4499 US Toll-free (If no mic on device)

- I. **Call to Order – Chair Darron Anglin**
- II. **Pledge of Allegiance**
- III. **Roll Call & Introduction of Guests**
- IV. **Approval of Minutes – (July 24, 2024)** P – F – T
- V. **Call to the Public** *(Members of the public may speak on any item not listed on the agenda. Items presented during the Call to the Public portion of the Agenda cannot be acted on by the Environmental Planning Committee (EPC). EPC members may ask questions of the public but are prohibited by the Open Meeting Law from discussing or considering the item among themselves until the item is officially placed on the agenda. Individuals are limited to a two-minute presentation. For the sake of efficiency, the Chair may eliminate the Call to the Public portion of any agenda.)*
- VI. **New Business**
 - A. Mountain Pass Utility Company (MPUC) Saddlebrooke Ranch Water Reclamation Plant Expansion CAG 208 Plan Amendment **(CAG ID # 2023-01)**
(EPC Recommendation) B. Emmerton (et. al.) P – F – T
 - B. Tri-City Regional Sanitary District 208 Plan Amendment; expand the current DMA Boundary to include the parcel of the new location site; and approve the new discharge location point due to the new proposed location. **(CAG ID # 2023-02)**
(EPC Recommendation) TRSD, (et.al.) P – F – T
 - C. Updates on DRAFT 208 Plan Amendments in Progress Steve Abraham Info.
 - D. Presentation and Discussion of the Pinal County Septic Study Steve Abraham Info.
 - E. Round Table All Info.
 - F. Future Agenda Items All Discussion
- VII. **Scheduling of Next Meetings – TBD** Steve Abraham Info.
- VIII. **Adjournment**

Approved by
(Andrea Robles, CAG Executive Director)



Environmental Planning Committee

July 17, 2024 Meeting Minutes

DATE: July 17, 2024

TIME: 10:00 a.m.

LOCATION: In Person/Via ZOOM Webinar

MEMBERS PRESENT:

Darron Anglin – <i>Chair</i> <i>(Apache Junction/SMCFD No. 1)</i>	Jake Garrett – <i>Vice Chair</i> <i>(Gila County)</i>	Vince Mariscal <i>(Globe)</i>
Atul Shah <i>(Pinal County)</i>	Mike Osborn <i>(Marana)</i>	Chris Jones <i>(U of A Coop. Extension)</i>
Robert Jacques <i>(Tri-City Regional Sanitary District)</i>	Alexis Rivera <i>(Miami)</i>	

MEMBERS ABSENT:

Ron Grittman <i>(Florence)</i>	Rick Miller <i>(Coolidge)</i>	Kevin Louis <i>(Casa Grande)</i>
Keith Loomis <i>(Maricopa)</i>	Keith DeVore <i>(Queen Creek)</i>	Matt Rencher <i>(Eloy)</i>
Gordon Dimbat <i>(Payson)</i>	Chris Montegue-Breakwell <i>(ADEQ)</i>	

GUESTS PRESENT:

Brent Emmerton
(Robson)

Robert Worley
(Robson)

Derek Anderson
(Sunrise Eng.)

Ryan Cluff
(Gila County)

Travis Ashbaugh
(Globe)

CAG Staff:

Andrea Robles
(CAG Executive Director)

Steve Abraham
(Water Quality Planning Director)

I. Call to Order

Chair Anglin called the meeting to order at 10:14 AM.

II. Pledge of Allegiance

Chair Anglin led the Committee in the Pledge of Allegiance.

III. Roll Call & Introduction of Guests

Roll call was taken. Eight (8) voting members were present, constituting a quorum as established by the CAG EPC Bylaws.

IV. Approval Of Minutes – (March 5, 2024)

Mr. Mariscal made the motion to approve the March 5, 2024, minutes as presented. Mr. Rivera seconded the motion. The motion passed unanimously.

V. Call to the Public

No one answered the call to the public.

VI. New Business

A. Mountain Pass Utility Company (MPUC) Saddlebrooke Ranch Water Reclamation Plant Expansion CAG 208 Plan Amendment (CAG ID # 2023-01) (Advance to Public Hearing).

Mr. Abraham introduced the project and provided a brief history of the amendment. He provided a general overview of the project and the plan which as proposed within this updated Plan Amendment, the current capacity for the Saddlebrooke Ranch WRP of 0.249 MGD will be increased to 0.498 MGD by 2025, by adding another biological processing unit (BPU) and clarifier for expanded treatment and redundancy. The build-out capacity will ultimately be 0.747 MGD. He then informed the EPC that CAG staff has no requested changes and recommends the EPC allow the plan amendment request to proceed to public hearing.

Mr. Abraham then introduced the applicant requesting the amendment, Mr. Brent Emmerton. Mr. Emmerton provided an in-depth explanation of the request and presented a power point to illustrate discussion topics. He informed the committee that this facility will only serve the current CC&N and only 1700 of the nearly 4000 homes slated for the development area have been constructed. The plan is to add another biological processing unit to serve the projected 3400 residents (in 2025). He commented that they used their developer projections rather than the MAG projections because they are more consistent with other general growth trends witnessed in the community up to this point. Based on current growth Mr. Emmerton anticipated another amendment would be needed prior to community build-out.

Mr. Emmerton then went into detail about the infrastructure improvements slated pending the approval of this plan. Effluent will be used to irrigate the golf course. The sludge, once dewatered, will be transported to the *Butterfield Landfill*. Financing will be paid by shareholders of the operating company and to his knowledge there have been no stakeholder objections to this request.

Chair Anglin asked if there were any questions. Vice Chair Garrett inquired about the reuse of the effluent and if there was sufficient capacity of the impoundment lake and sufficient consumption by the golf course, to continue avoiding any discharges (into Big Wash). Mr. Emmerton responded yes and continued to explain that they currently have to supplement golf course irrigation with ground water. Vice Chair Garret also requested clarification of buildout and estimated flow to confirm that discharges (into Big Wash) would be unnecessary. Mr. Emmerton confirmed that even with the 4000 dwelling units the community plans to construct an additional golf course (for a total of two golf courses) so effluent can be used there as well.

Mr. Jones inquired if the development is located within an *Active Management Area (AMA)*. Mr. Emmerton responded, yes, it is in the *Tucson AMA*. The *Certificate of Assured Water Supply* was previously approved (by the State of Arizona) for the entire area (Saddle Brooke Ranch).

Chair Anglin asked that the following administrative text changes be made: 1.) Correct the listed address, 2.) Under "Permits, pg. 15" of the attached document, Section 6.6 referenced a previously approved *AZPDES* permit and the most current should be listed, 3.) change, "a storm water permit is not needed by ADEQ", to "a storm water permit is needed by ADEQ"

Chair Anglin asked if there were any more comments or questions seeing none he called for a motion

Vice Chair Garret made the motion to allow case (**CAG ID # 2023-01**) Mountain Pass Utility Company (MPUC) Saddlebrooke Ranch Water Reclamation Plant Expansion to proceed to the public hearing as presented in the staff report. Member Mariscal seconded the motion. The motion passed unanimously.

B. Updates on DRAFT 208 Plan Amendments in Progress

Mr. Abraham provided a status update on 208 Amendments in review. Mr. Jacques also provided additional update of the TRSD amendment and highlighted and provided the EPC with an in-depth description of some of the comments received at the TRSD public hearing. Mr. Jacques also requested from CAG staff an explanation of why additional public out reach may be required in regards to the TRSD CAG 208 amendment proposal. Mr. Abraham responded that it is his desire to have the information packaged in a way that is easy to understand when the EPC eventually votes on the matter. He also explained that it is his goal to not have a tense situation at the EPC meeting, rather be able to show that all parties involved did their best to inform stakeholders, customers and service area residents and that we tried our best to alleviate their concerns even if many those concerns don't relate directly to the CAG 208 process. Mr. Abraham informed Mr. Jacques that as soon as CAG staff were through compiling and organizing the public comment he would be the first to know the strategy moving forward.

C. Round Table

Member entities that were in attendance did not have any updates for attending members.

D. Future Agenda Items

Mr. Jacques inquired if a date has been set for the EPC to review the TRSD CAG 208 Amendment. Mr. Abraham responded that no exact date has been set but is hopeful for a meeting in August or September. Executive Director Robles added that staff is still going through the comments and will coordinate with legal counsel on what comments will be included.

VII. Meeting Scheduling of Next Meeting

TBD

VIII. Adjournment

Mr. Jacques made the motion to adjourn the EPC meeting. Mr. Garrett seconded the motion. The motion passed unanimously. The meeting was adjourned at 10:49 AM.



	Information Only
✘	Motion to Approve

Date: October 10, 2024

To: Andrea Robles / EPC

From: Steve Abraham, AICP, Transportation & Water Quality Planning Director

Subject: CAG 208 ID #2023-01, MOUNTAIN PASS UTILITY COMPANY (MPUC), SADDLEBROOKE RANCH WATER RECLAMATION PLANT EXPANSION TUCSON, AZ CAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT.

Staff Recommended Motion:

I Move the CAG EPC recommend approval of case #2023-01 MOUNTAIN PASS UTILITY COMPANY (MPUC) to CAG Management Committee as presented in the staff report.

Summary Discussion:

This Plan Amendment supersedes the “Mountain Pass Utility Company – Phase 1, November 2000” CAG 208 Plan Amendment and any information regarding the Saddlebrooke Ranch Water Reclamation Plant (WRP) that was approved prior to this Plan Amendment.

The Plan Amendment serves to provide an updated planning document regarding the WRP for the next 20 years.

As proposed within this updated Plan Amendment, the current capacity for the Saddlebrooke Ranch WRP of 0.249 MGD will be increased to 0.498 MGD by 2025, by adding another biological processing unit (BPU) and clarifier for expanded treatment and redundancy. The build-out capacity will ultimately be 0.747 MGD.

Today’s action represents a recommendation of action to CAG’s Management Committee phase of the 208 Amendment process.

The Public Hearing on this matter was conducted on October 8, 2024. As of the writing of this report the public comment period is still open CAG staff will present a detailed summary of comments on this case at the EPC’s meeting.

Staff Concerns/Items for Discussion:

Staff have no additional concerns or recommended changes.

**Alternate Motions*

**With Changes:*

I Move the CAG EPC allow case #2023-01 MOUNTAIN PASS UTILITY COMPANY (MPUC) to proceed to Management Committee as presented in the staff report with the following Amendments:

- 1.*
 - 2.*
- Etc.*

**Continuance:*

I Move the CAG EPC continue case #2023-01 MOUNTAIN PASS UTILITY COMPANY (MPUC) to date & time certain) to address to following concerns:

- 1.*
 - 2.*
- Etc.*

**Deny*

*I Move the CAG EPC to recommend denial of case #2023-01 MOUNTAIN PASS UTILITY COMPANY (MPUC) with the following findings:
(please cite a minimum of three findings)*

MOUNTAIN PASS UTILITY COMPANY (MPUC)
SADDLEBROOKE RANCH WATER RECLAMATION PLANT EXPANSION
TUCSON, AZ

CAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT

DRAFT

March 2024

Revised August 2024

CAG 208 ID #2023-01

Prepared for:

MOUNTAIN PASS UTILITY COMPANY
FACILITY ADDRESS:
59283 E EGRET TRAIL
ORACLE, ARIZONA 85623
COMPANY PH: 480.895.4244

Prepared by:

SUNRISE ENGINEERING, INC.
2045 S. VINEYARD, SUITE 101
MESA, ARIZONA 85210
480.768.8600



Previous Amendments:

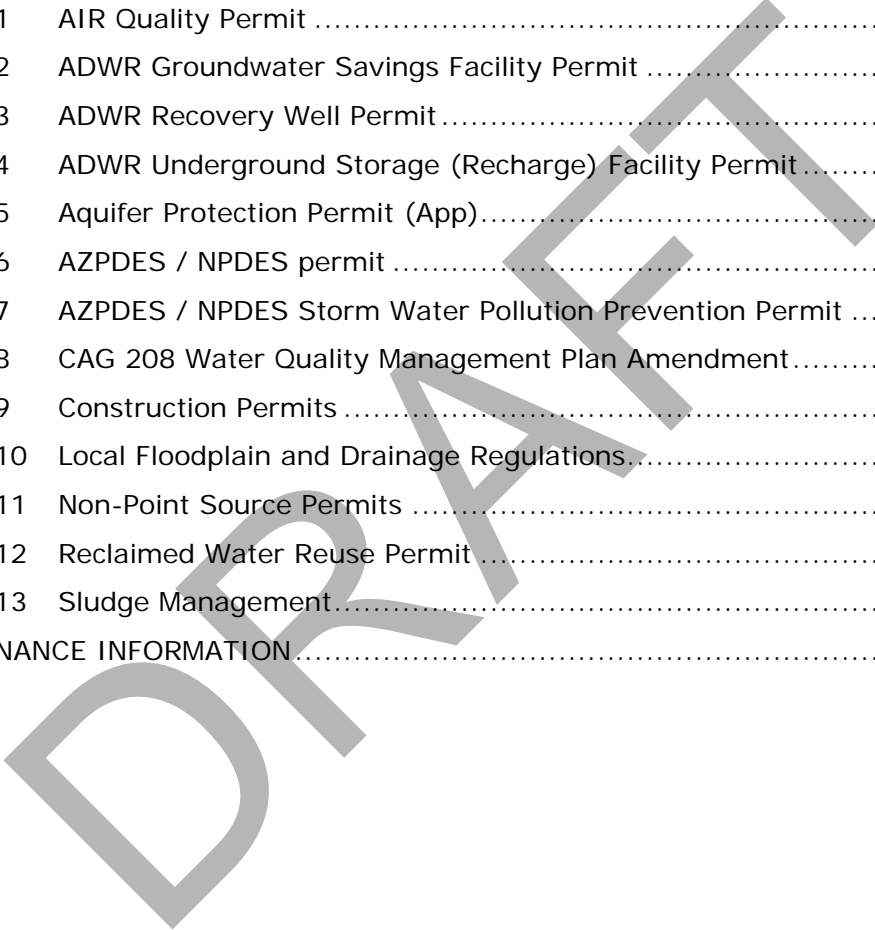
This CAG 208 Plan Amendment to the Saddlebrooke Ranch WRP supersedes the
“Mountain Pass Utility Company – Phase 1, November 2000” CAG 208 Plan Amendment

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LIST OF ACROMYMS

Acronym	Definition
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
APP	Aquifer Protection Permit
ASLD	Arizona State Land Department
AZPDES	Arizona Pollutant Discharge Elimination System
BPU	Biological Processing Unit
CAG	Central Arizona Governments
DMA	Designated Management Area
MAG	Maricopa Association of Governments
MGD	Million Gallons per Day
MPUC	Mountain Pass Utility Company
RWQS	Reclaimed Water Quality Standards
UV	Ultraviolet
WMU	Waste Management Utility
WRP	Water Reclamation Plant

DRAFT

1.0 INTRODUCTION

1.1 ABSTRACT

1.1.1 Amendment Description

The CAG Section 208 Water Quality Management Plan (CAG Regional Plan) categorizes Mountain Pass Utility Company (MPUC) as a Wastewater Management Utility (WMU) in which exclusive rights to plan for wastewater services is held within its Certificate of Convenience and Necessity (CC&N) only. The CC&N is the Service Area for WMU as defined within the CAG Regional Plan.

This Plan Amendment supersedes the “Mountain Pass Utility Company – Phase 1, November 2000” CAG 208 Plan Amendment and any information regarding the Saddlebrooke Ranch Water Reclamation Plant (WRP) that was approved prior to this Plan Amendment. The Plan Amendment serves to provide an updated planning document regarding the WRP for the next 20 years.

As proposed within this updated Plan Amendment, the current capacity for the Saddlebrooke Ranch WRP of 0.249 MGD will be increased to 0.498 MGD by 2025, by adding another biological processing unit (BPU) and clarifier for expanded treatment and redundancy. The build-out capacity will ultimately be 0.747 MGD.

1.1.2 Ownership

The Saddlebrooke Ranch WRP is owned and operated by Mountain Pass Utility Company (MPUC). MPUC maintains authority required by Section 208(c)(2) of the Clean Water Act to implement this plan.

1.1.3 Location

The Saddlebrooke Ranch WRP is in Pinal County, approximately one-mile northwest of Oracle Junction and 22 miles north of Tucson along Highway 77. The WRP is located at 59283 East Phoebe Lane, Tucson, in Township 10 South, Range 14 East, Section 7. The Service Area and WRP location is shown in Appendix G.

1.2 HISTORY OF THE PROPOSAL

This CAG 208 Plan Amendment (Plan Amendment) is being initiated as a result of the previous amendment elapsing the 20-year planning horizon, as it was initially approved in 2000.

MPUC intends to expand the Saddlebrooke Ranch WRP by adding another BPU and clarifier for expanded treatment and redundancy. The immediate need is to provide redundancy to the current treatment capacity at the WRP while also providing for future growth of the adjacent community. The effluent pumps at the WRP would continue to discharge to the golf course impoundment lake

and supply Saddlebrooke Ranch Golf Club with reclaimed water for turf irrigation via a lake pump station. The effluent produced by the WRP meets Reclaimed Water Quality Standards (RWQS) for Class B+ Reclaimed Water and is not anticipated to negatively impact aquifer water quality in the areas discharged for irrigation. Under the current AZPDES permit, the WRP is also authorized to discharge treated domestic wastewater to an unnamed wash, tributary to Big Wash, tributary to Canada del Oro in the Santa Cruz Basin. Under the proposed conditions, discharge to the unnamed wash would continue to only occur during emergency overflow conditions. To date, a discharge from the WRP to the unnamed wash has not occurred.

1.3 NATURAL ENVIRONMENT

1.3.1 Groundwater Hydrology

The Saddlebrooke Ranch WRP is located in Falcon Valley, which is located in northern Canada del Oro Valley, north of Oracle Junction. The valley is structurally a graben bounded by faults to the east and west. The regional aquifer in the area is contained within the basin alluvial deposits which are estimated to be greater than 3,200 feet thick.

Groundwater flow direction in the project area is to the south-southwest. The depth to groundwater in the project area is approximately 373 feet below land surface (bls).

2.0 PROJECT DESCRIPTION

2.1 OVERVIEW

2.1.1 Service Area

The CAG Section 208 Water Quality Management Plan (CAG Regional Plan) categorizes Mountain Pass Utility Company (MPUC) as a Wastewater Management Utility (WMU) in which exclusive rights to plan for wastewater services is held within its Certificate of Convenience and Necessity (CC&N) only. The CC&N is the Service Area for WMU as defined within the CAG Regional Plan.

The Saddlebrooke Ranch WRP is in Pinal County, approximately one-mile northwest of Oracle Junction and 22 miles north of Tucson along Highway 77. The Service Area includes approximately 2,500 acres of development northeast of the WRP. A map of the Service Area boundary is provided in Appendix G.

There is intent for future expansion of the Service Area from the current boundary within the next 20 years. The potential expansion would include 430 acres to the west for a total of 2,930 acres. MPUC understands that future expansion of its Service Area will trigger another CAG 208 Plan Amendment.

2.1.2 Facility Ownership

The Saddlebrooke Ranch WRP is owned and operated by MPUC. MPUC maintains authority required by Section 208(c)(2) of the Clean Water Act to implement this plan. MPUC owns the land in which the WRP is located.

2.1.3 Type of Facilities

The Saddlebrooke Ranch WRP includes wastewater treatment facilities that provide preliminary, secondary, tertiary treatment, and solids handling facilities. The current treatment process consists of an influent pump station that is equipped with a comminutor, splitter box, package BPU and clarifier, tertiary disc filter, ultraviolet (UV) disinfection, and effluent pump station.

Currently, the solids generated at the WRP are hauled offsite for dewatering. The liquid sludge is removed from the WRP clarifier and transported directly to the Butterfield Station Landfill.

The proposed WRP expansion would consist of a new bypass vault at the headworks, an additional BPU and clarifier, a new post equalization basin and discharge vault, and a new dewatering building. As per the proposed improvements, solids would now be dewatered on-site utilizing a new centrifuge dewatering system.

The effluent pumps supply the golf course impoundment lake and Saddlebrooke Ranch Golf Club with B+ reclaimed water for turf irrigation. The effluent pump station is also equipped with an overflow to the AZPDES discharge if the pumps are out of operation. The AZPDES discharge is an outfall adjacent to the property which directs flow to an unnamed tributary of Big Wash, during emergency.

2.1.4 Build Out Capacity

The Saddlebrooke Ranch WRP is currently permitted through the ADEQ Aquifer Protection Permit (APP) Program to produce up to 0.249 MGD. This Plan Amendment is proposing a 0.747 MGD build-out capacity for the WRP.

Table 1. Facility Capacity

Water Reclamation Plant	Saddlebrooke Ranch WRP
208 Planned Capacity, MGD	0.249
Aquifer Protection Permit Capacity, MGD	0.249
Current Constructed Capacity, MGD	0.249
Next Phase Capacity, MGD	0.249
Next Phase Total Capacity, MGD	0.498
Ultimate Buildout Capacity, MGD	0.747

2.1.5 Stakeholders and Neighboring Communities

Below are the identified stakeholders through this Plan Amendment process for the Saddlebrooke Ranch WRP. The purpose of the stakeholders is to provide comments and/or input that is focused on the technical aspects and completeness of the amendment proposal to identify any potential issues prior to moving forward with the public process.

- Pinal County

Per the CAG Water Quality Management Plan (2016), Section 5-6, Stakeholder Meeting(s): “If a stakeholder does not provide a ‘Letter of Support or No Objection’ or a ‘Letter of Objection’ received by CAG within 30 days (60 days for ASLD) from the initial stakeholders meeting, they forfeit their opportunity to object as a stakeholder and allow the applicant to move forward in the process.” Stakeholder Letters can be reviewed in Appendix C. The Arizona State Land Department (ASLD) was initially identified as a Stakeholder but elected to not issue a letter.

2.2 BOUNDARY & LEGAL DESCRIPTIONS

2.2.1 Facility Address

The Saddlebrooke Ranch WRP is located at 59283 East Egret Trail, Oracle, Arizona.

2.2.2 Legal Description

The Saddlebrooke Ranch WRP is located in Township 10 South, Range 14 East, Section 7. The WRP Service Area includes two full sections and five partial sections. Appendix G shows the Service Area for the WRP. The following table illustrates the sections served by the WRP.

Table 2. Sections Served by Saddlebrooke Ranch WRP

Township / Range	Section	Portion Served
T10S R14E	4	N ½
T10S R14E	5	Full
T10S R14E	7	SE ¼
T10S R14E	8	N ½, SW ¼
T9S R14E	32	Full
T9S R14E	33	S ½
T9S R14E	34	S ½

2.3 CURRENT & FUTURE CONDITIONS

2.3.1 Population

The Maricopa Association of Governments (MAG) conducts modeling activities to produce socioeconomic projections for population, dwelling units, and employment for Pinal County. The data is then reported to the State of Arizona to be used as the State's official estimates and projections. As part of MAG's modeling efforts, the data is refined to a smaller geographic boundary known as a Traffic Analysis Zone (TAZ). Some of the TAZs, and the data within them, were adjusted and/or extrapolated to fit the overall Service Area in order to provide the best population and dwelling unit estimates and projections.

Data received from MAG is presented in Table 3 and compared to developer projections. Due to the large discrepancy of projected growth patterns, developer data was chosen based on consistent sales patterns and known growth rates over the previous 15 years. Projections assume an occupancy density of two people per single family dwelling unit.

Table 3 indicates that growth was rapid over the first decade, with an average of 32% annual growth every year. Projected growth rates are predicted to be much slower, with annual growth between 3% and 6%.

Table 3. Population Projection for Service Area

Year	State Data Population Source: MAG MAZ 219010	Developer Data	
		Dwelling Units (single family)	Population (2 people per unit)
<i>Actual</i>			
2010	N/A	70	140
2015	N/A	411	822
2020	N/A	1,160	2,320
2022	N/A	1,490	2,980
<i>Projected</i>			
2025	5781	1,700	3,400
2030	7677	2,300	4,600
2035	8365	2,900	5,800
2045	8905	4,100	8,200
Build Out (2062)	8944	6,200	12,400

2.3.2 Land Use

The Maricopa Association of Governments (MAG) Land Use Explorer was utilized to obtain existing and projected future land use for the Saddlebrooke Ranch WRP Service Area. The MAG Land Use Explorer includes data from Maricopa and Pinal Counties that is published as of 2020.

The existing and future land usage for the Saddlebrooke Ranch WRP Service Area is shown in the following Table 4.

Table 4. Land Use, % of Total, Existing & Future Projections

Land Use Sector	Existing Conditions		Future Projections	
	Area, Acres	Area, % of Total	Area, Acres	Area, % of Total
Single Family	454	18.2%	1,500	60.0%
Industrial	3	0.1%	3	0.1%
Transportation	45	1.8%	150	6.0%
Open Space	258	10.3%	847	33.9%
Undeveloped	1,740	69.6%	0	0.0%
Total	2,500	100%	2,500	100%

2.3.3 Wastewater Flows

Metered Flow Records

Table 5 illustrates observed flow records for flows at the Saddlebrooke Ranch WRP for the year 2023. The current capacity of the Saddlebrooke Ranch WRP is 0.249 MGD. The max hour capacity is 1.0 MGD while the max day capacity is 0.5 MGD.

Table 5. Saddlebrooke Ranch WRP Existing Wastewater Flow Rates

Parameter	Value
Range of Flow, MGD	0.087 – 0.150
Max Month, MGD	0.137
Min Month, MGD	0.103
Max Day, MGD	0.150
Min Day, MGD	0.087

Future Flow Projections

Future flow projections are based on dwelling unit estimations based on master planned growth. Projections are also based on influent records from 2017 to 2022. The average daily flow per person is 40 gallons. See Table 6.

Table 6. Saddlebrooke Ranch WRP Wastewater Flow Projections

Year	Dwelling Units (single family)	Average Daily Flow MGD
2025	1,700	0.136
2030	2,300	0.184
2035	2,900	0.232
2045	4,100	0.328
Build Out (2062)	6,200	0.496

*Average Daily Flow = Dwelling Units x 2 (people per home) x 40 gallons per person

The intent of this Plan Amendment application is not to address the build out scenario or an expansion of the Service Area. A separate amendment will be submitted when further expansion is considered in the future which is anticipated in approximately 20 years. The scenario is provided for planning purposes only.

2.3.4 Sewer Master Plan

The master plan, “Saddlebrooke Ranch Master Sewer Report”, completed by B & R Engineering (2006), addresses the sewer collection system for the development through buildout. The report addresses design criteria to determine design flows and gravity line limitations, and gravity line sizing. According to the report, a network of gravity lines will convey sewage flow to the WRP, located at the southwest corner of the project, and no lift stations are required. The natural topography of the project slopes from northeast to southwest at 1 to 2% and pipe sizes range from 8-inch to 18-inch.

3.0 WASTEWATER TREATMENT FACILITY

3.1 TREATMENT FACILITY DESCRIPTION

3.1.1 Physical Address / Legal Description

The Saddlebrooke Ranch WRP is located at 59283 East Egret Trail, Oracle, Arizona in Township 10 South, Range 14 East, Section 7 SE 1/4.

3.1.2 Flow Rates

Influent flow rates based on wastewater flow records for 2023 are shown in Table 7. The Saddlebrooke Ranch WRP is currently designed to treat up to 0.249 MGD. The next phase of the facility, which will add an additional 0.249 MGD of capacity, has been designed and is anticipated to be online by 2025. The expansion will increase the treatable capacity to 0.498 MGD.

Table 7. Saddlebrooke Ranch WRP Existing Wastewater Flow Rates

Parameter	Value
Range of Flow, MGD	0.087 – 0.150
Max Month, MGD	0.137
Min Month, MGD	0.103
Max Day, MGD	0.150
Min Day, MGD	0.087

A summary of flow projections is shown in Table 8. The methodology for calculating these projections was included in Section 2.3.3.

Table 8. Saddlebrooke Ranch WRP Wastewater Flow Projections

Year	Dwelling Units (single family)	Average Daily Flow MGD
2025	1,700	0.136
2030	2,300	0.184
2035	2,900	0.232
2045	4,100	0.328
Build Out (2062)	6,200	0.496

3.1.3 Sewage Acceptance

The Saddlebrooke Ranch WRP receives 100% domestic sewage. The facility does not accept septic waste and there is no plan to accept septic waste in the future.

3.2 SEWAGE COLLECTION SYSTEM

3.2.1 Sewer Works Infrastructure

The Saddlebrooke Ranch WRP collection system includes a network of gravity sewer collection pipes. Gravity sewer mains range from 8-inches to 18-inches in diameter. The sewer collection system does not include any lift stations or force mains.

3.2.2 Treatment Process

The existing Saddlebrooke Ranch WRP includes a two-stage BNR activated sludge facility designed to meet permit limitations as described in the facility APP and AZPDES permit. The WRP was also designed to meet RWQS for Class B+ effluent. With the expansion project, the Saddlebrooke Ranch WRP will consist of preliminary, secondary, tertiary, and solids handling facilities. The following is a description of each facility.

Bypass Vault (proposed)

A bypass vault will be added with the proposed improvements. Influent will flow into the bypass vault prior to the influent pump station. The bypass vault will be equipped with a Muffin Monster in-line grinder for pre-treatment. A redundant bar screen and trash rack is also included in the event the Muffin Monster is down for maintenance.

Influent Pump Station (existing)

The influent pump station consists of a wetwell with two 7.5 hp submersible solids handling pumps and two VFD-controlled 3 hp pumps. Water is pumped to the splitter box.

Splitter Box (existing)

The splitter box is elevated for gravity flow into the BPUs. Flow enters from the bottom and flows over weirs to outlet chambers that are isolated with slide gates. A total of four outlets are available, one of which is in operation and directs flow into the existing BPU. A second chamber will become operational with the addition of a second BPU.

BPU (existing)

The BPU, aerobic sludge digester (ASD) and clarifier is a circular all-in-one unit with the biological processes and ASD in outer segments, and a circular clarifier in the middle. The unit is constructed as a package treatment plant complete with baffles, airlifts, mixers, and other required components. The combined volume of each BPU is 0.5 MG. The BPU uses the modified Ludzak Ettinger (mLE) flow-through activated sludge process to achieve the required nitrate limits specified in the APP. The

multi-stage centrifugal blowers located west of the BPU's provide compressed air for the treatment process.

Dewatering (proposed)

An on-site solids handling system will be added with the proposed improvements. Settled sludge will be pumped to a centrifuge where polymer will be added to the sludge stream for thickening. Dewatered solids will be discharged to a storage bin to be hauled off-site. Water removed during the process will be returned to the treatment system.

Post Equalization Basin (proposed)

A post equalization basin will also be added with the proposed improvements. The purpose of the post equalization basin is to reduce peak flows and associated impacts on downstream processes including filtration, disinfection, and final effluent handling. Discharge from the clarifiers will enter the post equalization basin where a modulating valve regulates flow to downstream treatment processes.

Tertiary Filtration (existing)

The tertiary filter is a disc filter which contains up to six woven cloth discs. Effluent flows inside the unit and out of the discs to the outlet weir.

UV Disinfection (existing)

The UV disinfection system is an open channel system that provides a dose of ultraviolet transmittance with three 40-lamp banks in series.

Flow Measurement (proposed)

Flow is measured following the post equalization basin modulating valve and following UV disinfection through MAG meters. Influent flow is not metered. Daily reclaimed water and discharges to the AZPDES outfall are measured separately and reported to ADEQ.

Effluent Pump Station (existing)

The effluent pump station consists of a concrete wetwell with duplex 10 hp vertical turbine pumps. The effluent pumps provide B+ reclaimed water to Saddlebrooke Ranch Golf Club for turf irrigation.

AZPDES Discharge (existing)

The effluent pump station is equipped with an overflow to the AZPDES discharge if the pumps are out of operation. The discharge consists of a an 18-inch effluent line that flows to Big Wash, which is adjacent to the property.

Standby Generator (existing)

A 350 kW, 480V, 3-phase diesel fuel generator provides standby power to the WRP when the utility power is out of service.

3.2.3 Products

Effluent

The Saddlebrooke Ranch WRP is designed to produce an effluent meeting Class B+ RWQS. This level of quality is enforceable through the ADEQ APP permit issued for the facility. Furthermore, the WRP must also meet effluent limits in accordance with the facility AZPDES permit which sets limits to ensure discharges do not cause or contribute to an exceedance of an applicable water quality standard when discharging to an unnamed tributary of Big Wash.

Sludge

Currently, sludge produced at the Saddlebrooke Ranch WRP is hauled off-site to the Saddlebrooke Wastewater Treatment Plant under AZPDES Permit #AZ0022853, where it is treated and dewatered prior to disposal at an authorized landfill. With the proposed expansion, Class B sludge produced by the Saddlebrooke Ranch WRP will be dewatered on-site using centrifuge dewatering technology. Dewatered sludge will be removed from the site and disposed of in an authorized landfill. The landfill that currently receives dewatered sludge is the Butterfield Station Landfill.

Butterfield Station Landfill
40404 99th Avenue
Maricopa, AZ 85139
Phone: (866) 909-4458

3.3 EFFLUENT MANAGEMENT

3.3.1 Overview

Currently there are three disposal methods for effluent from the Saddlebrooke Ranch WRP: lake impoundment, reuse at the golf course, and flow directed to an unnamed tributary of Big Wash, a Canada del Oro tributary (during emergency). In the future, other end users and uses could be

added to the disposal methods. The effluent pumps supply the Saddlebrooke Ranch Golf Club with B+ reclaimed water for turf irrigation under APP P-105334 to discharge a maximum of 0.249 MGD. The pump station is equipped with an overflow to the AZPDES discharge if the pumps are out of operation. The AZPDES discharge (Permit #AZ0024775) through Outfall 001 consists of an 18-inch effluent line adjacent to the facility. The unnamed wash leads to Big Wash.

The plan amendment proposes the next phase capacity increase to the Saddlebrooke Ranch WRP from 0.249 MGD to 0.498 MGD. Ultimate build-out capacity will be 0.747 MGD. Future effluent management will continue to include the same three disposal methods and may add groundwater recharging facilities via recharge basins and/or aquifer storage recovery wells. Recharge facilities could provide an additional option and flexibility for operators to manage increased effluent due to plant expansion.

3.3.2 Discharge

Effluent that is discharged is pumped from the effluent pump station to the golf course impoundment lake. In the event of an emergency discharge, an overflow at the effluent pump station discharges water to an unnamed tributary of Big Wash. The facility has current APP (P-105334) and AZPDES (AZ0024775) permits.

Table 9. AZPDES Discharge Outfall Location

AZPDES Outfall No.	Description	Latitude / Longitude
001	Surface Discharge to unnamed tributary of Big Wash	32° 34' 20" N 110° 56' 03" W

3.3.3 Reclamation / Reuse

The effluent is reused as reclaimed water for lake impoundment and irrigation of the Saddlebrooke Ranch Golf Club. Currently, 100% of the effluent reclaimed water is pumped to the golf course lake where it is added to well water and used for golf course irrigation.

4.0 CONSTRUCTION

4.1 CONSTRUCTION SUMMARY

The existing facility is currently capable of treating the wastewater generated from the adjacent development. The purpose of the plan amendment is to provide for expanded treatment capacity and redundancy. The Saddlebrooke Ranch WRP Expansion project has been designed and is ready for construction.

Table 10. Construction Summary

Phase	Year Capacity Available	Dwelling Units	Estimated Population	Treatment Capacity, MGD
1	2035	2,900	5,800	0.249
2	2052	4,960	9,920	0.498
3	2062	6,200	12,400	0.747

5.0 IMPACT

This plan amendment proposes to increase the capacity of the Saddlebrooke Ranch WRP by adding another BPU and clarifier for expanded treatment and redundancy. The immediate need is to provide redundancy to the current treatment capacity at the WRP while also providing for future growth of the adjacent community. Expansion of the existing Saddlebrooke Ranch WRP will provide continued benefits to the adjacent community and reduce impacts to the environment, including the following:

- The WRP provides treated effluent that may be reused as irrigation.
- The WRP reduces the potential for groundwater contamination from septic systems since adjacent residents must connect to the wastewater collection system.
- An expanded WRP will facilitate growth in the area in an environmentally safe manner.
- The WRP produces treated effluent that meets surface water quality standards where required.

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6.0 PERMITS

6.1 AIR QUALITY PERMIT

The Air Quality permit for the Saddlebrooke Ranch WRP is through Pinal County and regulates discharges from the onsite diesel generator. A second generator will not be added as part of the next phase.

6.2 ADWR GROUNDWATER SAVINGS FACILITY PERMIT

There is no Groundwater Savings Facility permit for the Saddlebrooke Ranch WRP.

6.3 ADWR RECOVERY WELL PERMIT

There is no ADWR Recovery Well permit for the Saddlebrooke Ranch WRP.

6.4 ADWR UNDERGROUND STORAGE (RECHARGE) FACILITY PERMIT

There is no ADWR Underground Storage Facility permit for the Saddlebrooke Ranch WRP.

6.5 AQUIFER PROTECTION PERMIT (APP)

The current APP (P-105334) for the Saddlebrooke Ranch WRP, issued November 4, 2011, is included in Appendix H.

6.6 AZPDES / NPDES PERMIT

The current AZPDES (AZ0024775) for the Saddlebrooke Ranch WRP, issued June 6, 2023, is included in Appendix H.

6.7 AZPDES / NPDES STORM WATER POLLUTION PREVENTION PERMIT

A Storm Water Pollution Prevention permit will be obtained at the time of Saddlebrooke Ranch WRP Expansion construction project, as required.

6.8 CAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT

This document will serve as the 208 Water Quality Plan Amendment for the Saddlebrooke Ranch WRP.

6.9 CONSTRUCTION PERMITS

Not applicable. The Saddlebrooke Ranch WRP expansion project is at the end of the design phase. At the time of construction, the appropriate construction permits will be obtained.

6.10 LOCAL FLOODPLAIN AND DRAINAGE REGULATIONS

The existing Saddlebrooke Ranch WRP project boundary is located outside Zone A of the mapped FEMA floodplain boundary.

6.11 NON-POINT SOURCE PERMITS

Not applicable.

6.12 RECLAIMED WATER REUSE PERMIT

A Type 2 Reclaimed Water General Permit (#106284) was issued to MPUC for B+ effluent from the Saddlebrooke Ranch WRP, which limits reuse to restricted access landscape including turf irrigation at the adjacent Saddlebrooke Ranch Golf Club.

6.13 SLUDGE MANAGEMENT

The sewage sludge from the Saddlebrooke Ranch WRP will be disposed of at an ADEQ approved landfill. The Class B sludge will be stabilized and dewatered prior to disposal. The landfill that currently receives dewatered sludge is the Butterfield Station Landfill.

Butterfield Station Landfill
40404 99th Avenue
Maricopa, AZ 85139
Phone: (866) 909-4458

7.0 FINANCE INFORMATION

The financing will consist of additional capital, paid by existing shareholders, to construct the Saddlebrooke Ranch WRP expansion project. The shareholders are ready, willing and able to finance the construction of the project. MPUC operates as a sewer utility under Title 14, Article 6 of the Arizona Administrative Code regulated by the Arizona Corporation Commission. MPUC's tariff (AOC Docket SW-03841A-00-0124, Decision No. 62757 effective 07/25/00) allows for a sewer hook-up fee (HUF) of \$30.00 and a monthly flat fee of \$49.25 per connection. The company has the authority to levy use-charges to finance construction and operation of the facilities. The golf courses will be owned and operated by the Homeowner's Association, while the Saddlebrooke Ranch WRP and reuse system will be owned and operated by MPUC. Effluent is sold to the HOA with average yearly revenues of approximately \$32,000 during the past three years.

The Engineer's Opinion of Probable Construction Costs for the expansion is summarized below.

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Opinion of Probable Costs

Owner: Mountain Pass Utility Company
Project: Saddlebrooke WRP Expansion 2022

By: EN
Date: Oct-22

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Mobilization	1	LS	\$ 325,000.00	\$ 325,000.00
2	Pre-Construction Video	1	LS	\$ 3,000.00	\$ 3,000.00
3	Subsurface Investigation (Locate and uncover existing utilities)	40	HR	\$ 300.00	\$ 12,000.00
4	Demolition (Shed and Concrete Pad)	1	LS	\$ 5,000.00	\$ 5,000.00
5	Materials Sampling & Testing	1	LS	\$ 10,000.00	\$ 10,000.00
6	Earthwork Excavation and Compaction (Bypass Vault, New BPU, Post EQ Basin, Post EQ Discharge Vault, Dewatering Building, and Polymer Shed, etc.)	1	LS	\$ 200,000.00	\$ 200,000.00
Subtotal					\$ 555,000.00
HEADWORKS BYPASS VAULT					
7	Concrete Vault	1	LS	\$ 20,000.00	\$ 20,000.00
8	Stop Gate	4	EA	\$ 1,500.00	\$ 6,000.00
9	Bar Screen and Trash Screen	1	EA	\$ 15,000.00	\$ 15,000.00
10	Muffin Monster	1	EA	\$ 75,000.00	\$ 75,000.00
11	Hand Rail	30	LF	\$ 150.00	\$ 4,500.00
12	Temporary Bypass Pumping	1	LS	\$ 20,000.00	\$ 20,000.00
13	Grating	1	LS	\$ 8,000.00	\$ 8,000.00
Subtotal of Bypass Vault					\$ 148,500.00
SPLITTER BOX MODIFICATIONS					
14	Support Modifications	1	LS	\$ 8,000.00	\$ 8,000.00
15	Adjustable V-Notch Weir Gate	3	EA	\$ 20,000.00	\$ 60,000.00
16	Grating	1	LS	\$ 10,000.00	\$ 10,000.00
17	12-Inch Welded Steel Outlet Piping to New BPU	50	LF	\$ 350.00	\$ 17,500.00
18	12-Inch Pipe Supports	3	EA	\$ 3,000.00	\$ 9,000.00
Subtotal of Splitter Box Modifications					\$ 104,500.00
BIOLOGICAL PROCESSING UNIT (BPU)					
19	Concrete Foundation	131	CY	\$ 900.00	\$ 117,900.00
20	Anti-Corrosion Coating for Concrete Foundation	1	LS	\$ 50,000.00	\$ 50,000.00
21	Biological Treatment Unit (BPU)	1	LS	\$ 1,955,000.00	\$ 1,955,000.00
22	6-Inch DIP (Clarifier Drain)	50	LF	\$ 144.00	\$ 7,200.00
23	8-Inch Plug Valve	1	EA	\$ 5,000.00	\$ 5,000.00
24	6-Inch Plug Valve	1	EA	\$ 4,000.00	\$ 4,000.00
25	4-Inch Plug Valve	2	EA	\$ 3,300.00	\$ 6,600.00
26	10-Inch Butterfly Valve	1	EA	\$ 3,000.00	\$ 3,000.00
27	10-Inch Check Valve	1	EA	\$ 3,000.00	\$ 3,000.00
28	10-Inch Rubber Expansion Joint	1	EA	\$ 2,000.00	\$ 2,000.00
Subtotal of BPU					\$ 2,153,700.00
BLOWER SYSTEM MODIFICATIONS					
29	Centrifugal Blower	1	LS	\$ 33,000.00	\$ 33,000.00
30	Blower Piping	1	LS	\$ 18,000.00	\$ 18,000.00
31	8-Inch Butterfly Valve	1	EA	\$ 2,300.00	\$ 2,300.00
32	8-Inch Check Valve	1	EA	\$ 2,200.00	\$ 2,200.00
33	8-Inch Rubber Expansion Joint	1	EA	\$ 1,500.00	\$ 1,500.00
34	Pressure Gauge	1	EA	\$ 220.00	\$ 220.00
Subtotal of Blower System Modifications					\$ 57,220.00
POST EQUALIZATION BASIN					
35	Concrete Foundation	25	CY	\$ 900.00	\$ 22,500.00
36	Tank with Stairs and Landing	1	LS	\$ 690,000.00	\$ 690,000.00
37	Level Sensor	1	EA	\$ 6,000.00	\$ 6,000.00
38	4-Inch DIP (To 6-Inch Clarifier Drain)	40	LF	\$ 120.00	\$ 4,800.00
39	8-Inch DIP	40	LF	\$ 160.00	\$ 6,400.00
40	12-Inch DIP	10	LF	\$ 200.00	\$ 2,000.00
41	12-Inch Plug Valve	1	EA	\$ 6,500.00	\$ 6,500.00
42	8-Inch Plug Valve	1	EA	\$ 5,000.00	\$ 5,000.00
43	4-Inch Plug Valve	1	EA	\$ 3,300.00	\$ 3,300.00
Subtotal of Post Equalization Basin					\$ 746,500.00
POST EQUALIZATION DISCHARGE VAULT					
44	Concrete Vault	1	LS	\$ 20,000.00	\$ 20,000.00
45	8-Inch Restrained Coupling	2	EA	\$ 400.00	\$ 800.00
46	8-Inch DIP	70	LF	\$ 160.00	\$ 11,200.00
47	8-Inch Plug Valve	3	EA	\$ 3,200.00	\$ 9,600.00
48	8-Inch Plug Valve and Electric Valve Actuator	1	EA	\$ 35,000.00	\$ 35,000.00
49	8-Inch Mag Flow Meter	1	EA	\$ 6,000.00	\$ 6,000.00
50	8-Inch Restrained Flanged Coupling Adapter	1	EA	\$ 650.00	\$ 650.00
51	Hand Rail	1	LS	\$ 5,000.00	\$ 5,000.00
52	4-Inch Drain Assembly	1	LS	\$ 400.00	\$ 400.00
Subtotal of Post Equalization Discharge Vault					\$ 88,650.00

TERTIARY DISC FILTER MODIFICATIONS					
53	Additional Disc Filter	1	EA	\$ 20,000.00	\$ 20,000.00
Subtotal of Tertiary Disc Filter Modifications					\$ 20,000.00
DEWATERING BUILDING					
54	Concrete Foundation (Dewatering Building and Polymer Shed)	25	CY	\$ 900.00	\$ 22,500.00
55	Dewatering Building	1	LS	\$ 120,000.00	\$ 120,000.00
56	4-Inch DIP	152	LF	\$ 120.00	\$ 18,240.00
57	4-Inch Plug Valve	1	EA	\$ 3,300.00	\$ 3,300.00
58	6-Inch DIP	30	LF	\$ 144.00	\$ 4,320.00
59	6-Inch Plug Valve	2	EA	\$ 4,000.00	\$ 8,000.00
60	6-Inch Restrained Coupling	1	EA	\$ 1,000.00	\$ 1,000.00
61	4-Inch Ultrasonic Flow Meter	1	EA	\$ 6,000.00	\$ 6,000.00
62	Roll Off Dumpster	1	LS	\$ 20,000.00	\$ 20,000.00
63	Progressive Cavity Pump	1	LS	\$ 24,000.00	\$ 24,000.00
64	Aldec 75 Centrifuge Decanter	1	LS	\$ 425,000.00	\$ 425,000.00
65	Centrifuge Spare Rotating Assembly	1	LS	\$ 230,000.00	\$ 230,000.00
66	Manual Trolley Hoist	1	EA	\$ 6,000.00	\$ 6,000.00
67	Pressure Gauge	1	EA	\$ 800.00	\$ 800.00
68	4-Inch Pipe Supports	5	EA	\$ 250.00	\$ 1,250.00
69	2.5-Inch DIP and Fittings	25	LF	\$ 86.00	\$ 2,150.00
70	2-Inch Ball Valve	1	EA	\$ 1,000.00	\$ 1,000.00
71	2.5-Inch Ball Valve	1	EA	\$ 1,200.00	\$ 1,200.00
72	Polymer Shed	1	LS	\$ 35,000.00	\$ 35,000.00
73	Polymer Skid	1	EA	\$ 19,000.00	\$ 19,000.00
74	3/4-Inch PVC	110	LF	\$ 16.00	\$ 1,760.00
75	Eye Wash Station	1	LS	\$ 3,000.00	\$ 3,000.00
76	2-Inch PVC	30	LF	\$ 22.00	\$ 660.00
77	4-Inch Drain Assembly	3	EA	\$ 400.00	\$ 1,200.00
78	Bollard Protection Post	2	EA	\$ 420.00	\$ 840.00
79	Grating	1	LS	\$ 16,000.00	\$ 16,000.00
Subtotal of Dewatering Building					\$ 972,220.00
PLANT REUSE WATER SYSTEM MODIFICATIONS					
80	Plant Reuse Water	1	LS	\$ 32,000.00	\$ 32,000.00
Subtotal of Plant Reuse Water System Modifications					\$ 32,000.00
SITE PIPING					
81	10-Inch Welded Steel Air Piping to New BPU	90	LF	\$ 160.00	\$ 14,400.00
82	8-Inch PVC (Clarified Water)	20	LF	\$ 120.00	\$ 2,400.00
83	6-Inch PVC (Clarifier Drain)	270	LF	\$ 95.00	\$ 25,650.00
84	4-Inch PVC (Anoxic and Aeration Drains)	50	LF	\$ 80.00	\$ 4,000.00
85	4-Inch PVC (To 6-Inch Clarifier Drain)	20	LF	\$ 80.00	\$ 1,600.00
86	8-Inch PVC (Post Eq to Post Eq Vault)	40	LF	\$ 120.00	\$ 4,800.00
87	12-Inch PVC (Post Eq Influent)	100	LF	\$ 180.00	\$ 18,000.00
88	4-Inch PVC (Post Eq Vault Drain)	30	LF	\$ 80.00	\$ 2,400.00
89	6-Inch PVC (Sludge Line)	270	LF	\$ 95.00	\$ 25,650.00
90	Influent Wet Well Penetration	2	EA	\$ 1,200.00	\$ 2,400.00
91	4-Inch PVC (Polymer Shed Drain to Dewatering Building Drain)	50	LF	\$ 80.00	\$ 4,000.00
92	2-Inch PVC (Reclaimed Water Main)	290	LF	\$ 52.00	\$ 15,080.00
93	2-Inch PVC (Washdown Water Main)	140	LF	\$ 52.00	\$ 7,280.00
94	6-Inch PVC (Dewatering Building Drain)	280	LF	\$ 95.00	\$ 26,600.00
95	Manhole	1	EA	\$ 6,000.00	\$ 6,000.00
Subtotal of Site Piping					\$ 160,260.00
ELECTRICAL					
96	Blower Controls	1	LS	\$ 30,000.00	\$ 30,000.00
97	New BPU Electrical	1	LS	\$ 55,000.00	\$ 55,000.00
98	Post Equalization Basin Level Sensor Controls	1	LS	\$ 18,000.00	\$ 18,000.00
99	Post Equalization Basin Lighting	1	LS	\$ 15,000.00	\$ 15,000.00
100	8-Inch Modulating Valve Controls	1	LS	\$ 12,000.00	\$ 12,000.00
101	8-Inch Ultrasonic Flow Meter Controls	1	LS	\$ 12,000.00	\$ 12,000.00
102	Aldec 75 Centrifuge Controls	1	LS	\$ 25,000.00	\$ 25,000.00
103	Progressive Cavity Pump Controls	1	LS	\$ 18,000.00	\$ 18,000.00
104	4-Inch Ultrasonic Flow Meter Controls	1	LS	\$ 4,000.00	\$ 4,000.00
105	Promix Polymer Skid Controls	1	LS	\$ 8,000.00	\$ 8,000.00
106	Polymer Shed Lighting	1	LS	\$ 15,000.00	\$ 15,000.00
107	Dewatering Building Electrical and Lighting	1	LS	\$ 65,000.00	\$ 65,000.00
108	Plant Reuse Water Submersible Pump Controls	1	LS	\$ 25,000.00	\$ 25,000.00
109	Splitter Box Lighting	1	LS	\$ 15,000.00	\$ 15,000.00
110	MCC Modifications	1	LS	\$ 100,000.00	\$ 100,000.00
Subtotal of Electrical					\$ 417,000.00
SCADA INTEGRATION					
111	SCADA Integration	1	LS	\$ 65,000.00	\$ 65,000.00
Subtotal SCADA Integration					\$ 65,000.00
Construction Subtotal					\$ 5,521,000
Contingency 20%					\$ 1,104,000
TOTAL CONSTRUCTION					\$ 6,625,000

In providing opinions of probable construction cost, the Client understands that the Engineer has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made on the basis of the Engineer's qualifications and experience. The Engineer makes no warranty, expressed or implied, as to the accuracy of such opinions compared to bid or actual costs.

MOUNTAIN PASS UTILITY COMPANY

9532 East Riggs Road, Sun Lakes, Arizona 85248

May 12, 2023

Arizona Department of Environmental Quality
Groundwater Protection Value Stream
1110 W. Washington Street
Phoenix, AZ 85007

Re: Mountain Pass Utility Company Water Reclamation Plant (WRP) Expansion
Significant Amendment to Aquifer Protection Permit No. 105334
Letter of Financial Assurance

To Whom it May Concern:

As the Mountain Pass Utility Company's Chief Financial Officer, I certify that the Mountain Pass Utility Company has the financial capability to construct, operate, maintain, close, and post-closure care of the Water Reclamation Plant. The attached cost summary provided by our consultant, Sunrise Engineers, is a true and best estimate of the total costs associated with construction and operation of the WRP Expansion. The company has the authority to levy use-charges to finance construction, operation, closure and post-closure care costs associated with the facility.

I verify under penalty of perjury that the above is true and correct.

Sincerely,
Mountain Pass Utility Company



Brian Smith, Chief Financial Officer

Enclosures: Cost Summary

APPENDICES

Appendix A – 208 Checklist

Appendix B – Self Certification Letter

Appendix C – Letters of Support

Appendix D – Legal Description

Appendix E – Record of Public Participation

Appendix F – Communications

Appendix G – Maps

Appendix H – Saddlebrooke Ranch WRP APP & AZPDES Permits

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APPENDIX A

208 Checklist

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**Section 208 Clean Water Act
40 CFR Part 130.6**

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
<p><u>AUTHORITY</u></p> <p>1) 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.</p>	<p>MPUC has the authority to implement this plan. MPUC is a private utility company and is considered as a WMU within the CAG Section 208 Water Quality Management Plan. WMUS cannot be a DMA. A self-certification letter is included in Appendix B.</p>	<p>Section 1.1.2 Section 2.1.2 Appendix B</p>
<p><u>20-YEAR NEEDS</u></p> <p>Clearly describe the existing wastewater treatment (WWT) facilities:</p> <p>2) Describe existing WWT facilities.</p>	<p>The existing Saddlebrooke Ranch WRP consists of a two-stage BNR activated sludge facility with a capacity of 0.249 MGD.</p> <p>Treated effluent from Saddlebrooke Ranch WRP is pumped from the effluent pump station to the adjacent golf course impoundment lake. The effluent is reused as reclaimed water for lake impoundment and irrigation of the Saddlebrooke Ranch Golf Club.</p>	<p>Section 3.2.2 Section 3.3</p>
<p>3) Show WWT certified and service areas for private utilities and sanitary district boundaries if possible.</p>	<p>The MPUC Service Area is described in the report and shown as an exhibit in Appendix G. The Service Area is located approximately one-mile northwest of Oracle Junction and 22 miles north of Tucson along Highway 77. The Service Area includes approximately 2,500 acres of development.</p>	<p>Section 2.1.1 Appendix G</p>
<p>Clearly describe alternatives and the recommended WWT plan:</p> <p>4) Provide POPTAC population estimates (or COG-approved estimates only where POPTAC not available) over 20-year period.</p>	<p>Population projections are based on dwelling unit estimations based on master planned growth. Projections assume an occupancy density of two people per single family unit. Population estimates show anticipated growth in the Saddlebrooke Ranch WRP Service Area from about 2,980 in 2022 to 8,200 people in 2045.</p>	<p>Section 2.3.1</p>
<p>5) Provide wastewater flow estimates over the 20-year planning period.</p>	<p>Future wastewater flow estimates are based on dwelling unit estimations based on master planned growth. Projections are also based on influent records from 2017 to 2022. Average daily flow in 2045 is estimated at 0.328 MGD.</p>	<p>Section 2.3.3</p>
<p>6) Illustrate the WWT planning and service areas.</p>	<p>The Service Area is shown in Appendix G.</p>	<p>Appendix G</p>

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**Section 208 Clean Water Act
40 CFR Part 130.6**

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Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
7) Describe the type and capacity of the recommended WWT Plant.	The current constructed facility capacity and permitted capacity flow rates are summarized in Section 2.1.4. The Saddlebrooke Ranch WRP is currently designed for 0.249 MGD with a permitted flow of 0.249 MGD. An expansion project has been designed, is ready for construction, and would add an additional 0.249 MGD to the next phase capacity (total capacity of 0.498 MGD) with an ultimate buildout capacity of 0.747 MGD.	Section 2.1.4, Table 2
8) Identify water quality problems, consider alternative control measures, and recommend solution for implementation.	No water quality problems have been identified as the facility is designed to meet the water quality parameters of the APP and the AZPDES permit.	Section 5.0
9) 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?	The Saddlebrooke Ranch WRP is owned and operated by MPUC for the defined Service Area. There are no other WMUs within the Service Area.	Appendix G
10) Describe method of effluent disposal and reuse sites (if appropriate).	The Saddlebrooke Ranch WRP produces B+ reclaimed water. Currently there are three disposal methods for effluent from the WRP: lake impoundment, reuse at the adjacent golf course, and flow directed to an unnamed tributary of Big Wash (during emergency). 100% of the effluent is currently being used for the golf course. Future effluent management will continue to include the same disposal methods as the current permit is sufficient for added flows due to the proposed expansion. Effluent disposal locations are described in the report.	Section 3.3
11) If Sanitary Districts are within a proposed planning or service area, describe who serves the Sanitary Districts and when.	Does not apply.	
12) Describe ownership of land proposed for plant sites and reuse areas.	The land for the Saddlebrooke Ranch WRP is owned by MPUC. The golf course is owned by the developer and operated by the HOA.	Section 2.1.2
13) Address time frames in the development of the treatment works.	The Saddlebrooke Ranch WRP expansion project has been designed and is ready for construction.	Section 4.1

[Type here]

**Section 208 Clean Water Act
40 CFR Part 130.6**

[Type here]

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
14) Address financial constraints in the development of the treatment works.	MPUC does not anticipate financial constraints in the development of the expansion project. Financing will consist of capital from existing shareholders to construct the project.	Section 7.0
15) Describe how discharges will comply with EPA municipal and industrial stormwater discharge regulations (Section 405, CWA).	The Saddlebrooke Ranch WRP is permitted to discharge through AZPDES permit. A SWPPP will be obtained at the time of construction of the expansion project.	Section 6.6
16) Describe how open areas and recreational opportunities will result from improved water quality and how those will be used.	Effluent from the Saddlebrooke Ranch WRP is used for lake impoundment and irrigation of the Saddlebrooke Ranch Golf Club. Effluent may be used for other end users should the opportunity arise.	Section 3.3.3
17) Describe potential use of lands associated with treatment works and increased access to water-based recreation, if applicable.	As described in 16 above, treated effluent from Saddlebrooke Ranch WRP is reused for beneficial use, including lake impoundment and irrigation of the Saddlebrooke Ranch Golf Club.	Section 3.3.3
REGULATIONS 18) Describe types of permits needed, including AZPDES, APP and reuse.	The Saddlebrooke Ranch WRP has a valid APP (APP P-105334), and AZPDES permit (AZ0024775). MPUC has a Type 2 Reclaimed Water General permit (106284) for B+ effluent from the WRP.	Section 6.0
19) Describe restrictions on AZPDES permits, if needed, for discharge and sludge disposal.	The AZPDES permit allows surface discharge at one outfall point for emergency discharges only.	Section 6.6
20) Provide documentation of communication with ADEQ Permitting Section 30 to 60 days prior to public hearing regarding the need for specific permits.	Pending	
21) Describe pretreatment requirements and method of adherence to requirements (Section 208 (b)(2)(D), CWA).	No pretreatment requirements.	
22) 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).	A SWPPP will be obtained at the time of construction of the expansion project.	Section 6.7

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**Section 208 Clean Water Act
40 CFR Part 130.6**

[Type here]

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
23) Describe alternatives and recommendation in the disposition of sludge generated. (Section 405 CWA)	Currently, sludge produced at the Saddlebrooke Ranch WRP is hauled off-site to the Saddlebrooke WWTP where it is treated and dewatered prior to disposal at Butterfield Station Landfill. With the proposed expansion, sludge produced by the WRP will be dewatered on-site using centrifuge dewatering technology. Dewatered sludge will be removed from the site for disposal at Butterfield Station Landfill.	Section 3.2.3
24) Define any nonpoint issues related to the proposed facility and outline procedures to control them.	There are no anticipated or known non-point pollution issues.	Section 6.11
25) Describe process to handle all mining runoff, orphan sites and underground pollutants, if applicable.	No mining run-off, orphan sites, or known underground pollutants are involved with the Saddlebrooke Ranch WRP.	N/A
26) If mining related, define where collection of pollutants has occurred, and what procedures are going to be initiated to contain contaminated areas.	N/A	N/A
27) If mining related, define what specialized procedures will be initiated for orphan sites, if applicable.	N/A	N/A
<u>CONSTRUCTION</u> 28) Define construction priorities and time schedules for initiation and completion.	The Saddlebrooke Ranch WRP Expansion project has been designed and is ready for construction. The facility will be expanded from 0.249 MGD to 0.498 MGD. Ultimate buildout capacity is 0.747 MGD.	Section 4.1
29) Identify agencies that will construct, operate and maintain the facilities and otherwise carry out the plan.	MPUC is the owner and operator of the facility.	Section 2.1.2

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**Section 208 Clean Water Act
40 CFR Part 130.6**

[Type here]

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
30) Identify construction activity-related sources of pollution and set forth procedures and methods to control, to the extent feasible, such sources.	When the Saddlebrooke Ranch WRP expansion is under construction, a general SWPPP will be obtained by the contractor to minimize pollution.	Section 6.7 Section 6.9
<u>FINANCING AND OTHER MEASURES NECESSARY TO CARRY OUT THE PLAN</u>	N/A	N/A
31) If plan proposes to take over certificated private utility, describe how, when and financing will be managed.		
32) Describe any significant measure necessary to carry out the plan, e.g., institutional, financial, economic, etc.	No significant measures are required to carry out the plan. Shareholders are ready and willing to finance the construction of the project.	
33) Describe proposed method(s) of community financing.	MPUC's tariff allows for a sewer hook-up fee of \$30 and a monthly flat fee per connection of \$49.25.	Section 7.0
34) Provide financial information to assure DMA has financial capability to operate and maintain wastewater system over its useful life.	Refer to the included Financial Assurance Letter signed by the Chief Financial Officer dated May 12, 2023. The letter was prepared in support of the Aquifer Protection Amendment.	Section 7.0
35) Provide a time line outlining period of time necessary for carrying out plan implementation.	The expansion of the Saddlebrooke WRP from a total capacity of 0.249 MGD to 0.498 MGD is anticipated to be completed and online in 2025. Ultimate build-out capacity of 0.747 MGD is anticipated by 2062.	Section 4.1
36) Provide financial information indicating the method and measures necessary to achieve project financing. (Section 201 CWA or Section 604 may apply).	Financing will consist of capital from existing shareholders to construct the project.	Section 7.0

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**Section 208 Clean Water Act
40 CFR Part 130.6**

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Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
<p><u>IMPLEMENTABILITY</u></p> <p>37) Describe impacts and implementability of Plan.</p> <p>38) Describe impacts on existing wastewater (WW) facilities, e.g., Sanitary district, infrastructure/facilities and certificated areas.</p>	<p>The change proposed, which is to increase the capacity of the Saddlebrooke Ranch WRP, will not impact existing wastewater facilities. The effluent discharge strategy will remain the same, with effluent discharging first to the lake impoundment then reuse/irrigation of the Saddlebrook Ranch Golf Club. Surface discharge to an unnamed tributary of Big Wash will only be used in an emergency.</p>	<p>Section 3.3.1</p>
<p>39) Describe how and when existing package plants will be connected to a regional system.</p>	<p>N/A</p>	<p>N/A</p>
<p>40) Describe the impact on communities and businesses affected by the plan.</p>	<p>The WRP expansion will improve the capability and operational flexibility to treat existing and new sewage flows as the Saddlebrooke Ranch retirement community continues to add new residents and businesses (retirement amenities).</p>	
<p>41) If a municipal 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).</p>	<p>The Saddlebrooke Ranch WRP is a private utility in unincorporated Pinal County. Package plants and septic systems will not be allowed within the existing Service Area defined within this Amendment.</p>	<p>N/A</p>
<p><u>PUBLIC PARTICIPATION</u></p> <p>42) 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)</p>	<p>Pending</p>	
<p>43) List location where documents are available for review at least 30 days before public hearing.</p>	<p>Pending</p>	

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**Section 208 Clean Water Act
40 CFR Part 130.6**

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Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
44) 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.	Pending	
45) Submit affidavit of publication for official newspaper publication.	Pending	
46) Submit responsiveness summary for public hearing.	Pending	

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APPENDIX B

Self Certification Letter

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MOUNTAIN PASS UTILITY COMPANY

9532 East Riggs Road, Sun Lakes, Arizona 85248

August 30, 2023

Central Arizona Governments
Attention: Andrea Robles, Executive Director
2540 W. Apache Trail, Suite 108
Apache Junction, Arizona 85219

Re: Mountain Pass Utility Company, 208 Plan Amendment – Self Certification

Dear Ms. Robles:

On behalf of Mountain Pass Utility Company, I hereby certify that (i) Mountain Pass Utility Company owns and operates wastewater treatment works that serve customers within Arizona Corporation Commission designated service area; and pursuant to Section 208 of the Clean Water Act [33 U.S.C. §1288(c)(2)(A) through (I)] Mountain Pass Utility Company is authorized by law:

- (A) To carry out appropriate portions of the Central Arizona Governments' Areawide Water Quality Management Plan (208 Plan) developed under Section 208 of the Clean Water Act;
- (B) To manage effectively waste treatment works and related facilities serving such area in conformance with the 208 Plan;
- (C) Directly or by contract, to design and construct new works, and to operate and maintain new and existing works as required by the 208 Plan;
- (D) To accept and utilize grants, or other funds from any source, for waste treatment management purposes;
- (E) To raise revenues, including the assessment of waste treatment charges;
- (F) To incur short- and long-term indebtedness;
- (G) To assure in implementation of the 208 Plan that each participating community pays its proportionate share of treatment costs;

(H) To refuse to receive any wastes from any municipality or subdivision thereof, which does not comply with any provisions of the 208 Plan applicable to such area; and

(I) To accept for treatment industrial wastes.

Please let me know if your department needs any additional information in connection with this self-certification.

Sincerely,
Mountain Pass Utility Company



Brian Smith, Vice President

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APPENDIX C

Letters of Support

DRAFT

Leo Lew
County Manager



PINAL COUNTY
WIDE OPEN OPPORTUNITY

Himanshu Patel
Deputy County Manager

Mary Ellen Sheppard
Deputy County Manager

Brent Billingsley
Director Community Development

September 12, 2023

Travis Ashbaugh
Central Arizona Governments 2540
W. Apache Trail, Suite 108
Apache Junction, AZ 85120

Re: SADDLEBROOKE RANCH WATER RECLAMATION PLANT EXPANSION

Dear Mr. Ashbaugh:

This constitutes Pinal County's comment/response with respect to the expansion of the Saddlebrooke Ranch WRP is in Pinal County, approximately one-mile northwest of Oracle Junction and 22 miles north of Tucson along Highway 77. The service area includes approximately 2,500 acres of development northeast of the WRP.

Pinal County has long maintained that 208 applications should clearly affirm whether adjoining political subdivisions and wastewater providers within the CAG Region support CAG 208 applications. Pinal County supports the Saddlebrooke Ranch efforts to obtain a CAG 208 Amendment and recommends approval of their application.

Should you have any further questions or concerns, do not hesitate to discuss the matter with me at your convenience.

Sincerely,

Atul Shah, PE
Pinal County Community Development
Aquifer Protection Division

COMMUNITY DEVELOPMENT
Aquifer Protection Division

85 North Florence Street, Building F, PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6007

www.pinalcountyaz.gov

APPENDIX D

Legal Description

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Appendix D – Legal Description

The Saddlebrooke Ranch WRP is located in Township 10 South, Range 14 East, Section 7. The WRP service area includes two full sections and five partial sections.

Table D-1. Legal Description (Service Area)

Township / Range	Sections	
	Full	Partial (Approximate)
T10S R14E	5	4 (N ½), 7 (SE ¼), 8 (N ½, SW ¼)
T9S R14E	32	33 (S ½), 34 (S ½)

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APPENDIX E

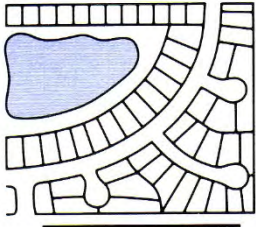
Record of Public Participation

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APPENDIX F

Communications

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B&R ENGINEERING, INC.

CIVIL ENGINEERING • LAND DEVELOPMENT

9666 E. Riggs Road, Suite 118, Sun Lakes, AZ 85248-7404 • (480) 895-0799 • FAX (480) 895-5557

June 10, 2024

Andrea Robles, Executive Director
Central Arizona Governments
2540 W. Apache Trail, Suite 108
Apache Junction, AZ 85120

Re: **Mountain Pass Utility Company SaddleBrooke Ranch Water Reclamation Plant**

Dear Ms. Robles,

In response to your comments received 6/10/24, please see responses to each comment below:

1. *PDF Page 11, within Table 3, regarding the “State Data Population Source” label of “MAG MAZ 219010.” What is an MAZ? Should it be TAZ for Traffic Analysis Zone?*

Response: Based on email correspondence with Jesse Ayres at MAG, the TAZ boundary can be subdivided into smaller MAZ boundaries which was beneficial for the Saddlebrooke Ranch analysis. Refer to Attachment A for the email correspondence.

2. *PDF Page 12, in Table 6, the original comment was not addressed. The original comment was “Should this be 1.0 MGD....since that’s what the ultimate Build-Out Capacity is?” The Response Sheet provided stated that it was revised but I don’t see any changes (or explanation fi the 0.496 figure should remain under “Average Daily Flow” for Build-out). I’m assuming since this is average daily flow that this is different than the ultimate capacity (which I now understand is 0.747 MGD).*

Response: You are correct, the ultimate capacity (0.747 MGD) is greater than the build out average daily flow (0.496 MGD) to provide operational flexibility and to ensure effluent parameters/quality, specified in the Aquifer Protection Permit (APP), are achieved.

If you have any questions or require additional information, please contact me at 480-883-2120 or bemmerton@bnraz.com

Sincerely,
B&R Engineering, Inc.

Brent Emmerton

ATTACHMENT A
MAG Correspondence

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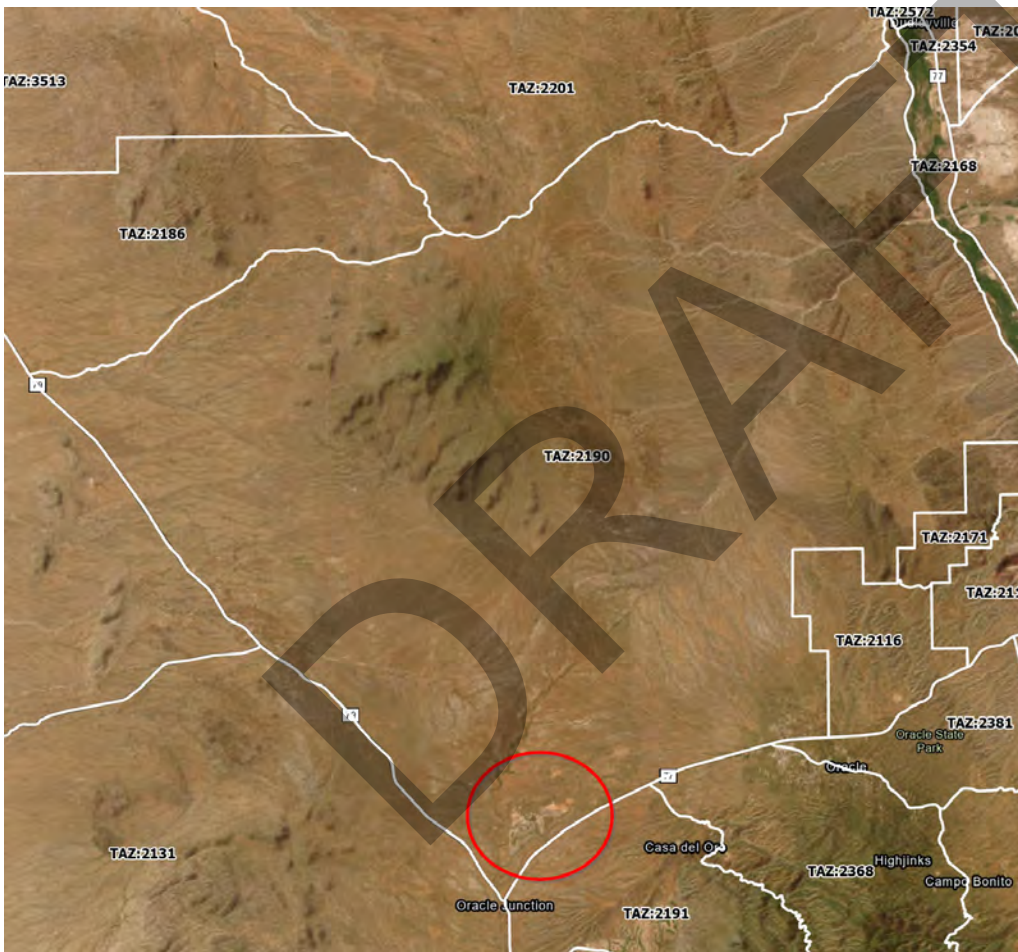
Brent Emmerton

From: Jesse Ayers <JAyers@azmag.gov>
Sent: Thursday, January 4, 2024 3:36 PM
To: Brent Emmerton
Subject: RE: Message from AZMAG.gov

Hi Mr. Emmerton,

I can help you with your request. First I have a few questions for you: Are you doing work on behalf of one of our member agencies? (Cities and towns in Maricopa County and northern Pinal County, including the counties themselves)

How large of an area are you interested in looking at? The TAZ that Saddlebrooke Ranch is in is pretty large:



I can also offer projections by our MAZ geography, which cuts up the TAZes into smaller pieces:



Finally, what years are you interested in besides 2060? We have every year from 2020 to 2060 available.

Thanks!

-- Jesse Ayers
-- Socioeconomic Modeling Program Manager
-- Maricopa Association of Governments
-- www.azmag.gov [azmag.gov]

-----Original Message-----

From: Anubhav Bagley <abagley@azmag.gov>
Sent: Thursday, January 4, 2024 2:58 PM
To: Jesse Ayers <JAyers@azmag.gov>
Cc: Scott Wilken <SWilken@azmag.gov>
Subject: FW: Message from AZMAG.gov

Hi, Jesse - Can you please help Brent with this request? Thanks

-----Original Message-----

From: SQLService@azmag.gov <SQLService@azmag.gov>
Sent: Thursday, January 4, 2024 10:11 AM
To: Anubhav Bagley <abagley@azmag.gov>
Subject: Message from AZMAG.gov

The message below was sent to you by a visitor to the MAG website.

Name: Brent Emmerton
Email: bemmerton@bnraz.com
Page Sent From: <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fazmag.gov%2FAbout-Us%2FContact-Us&data=05%7C02%7CJAyers%40azmag.gov%7C2925c98fa0f941a73f0008dc0d703a06%7C0bd2ae09fa4b4de6a3c3c1884d595b44%7C0%7C0%7C638400022875369123%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=iCFuocwG5dYm1aJ6eV4UB8C590Msu7V3%2B2NqLerZnAQ%3D&reserved=0>

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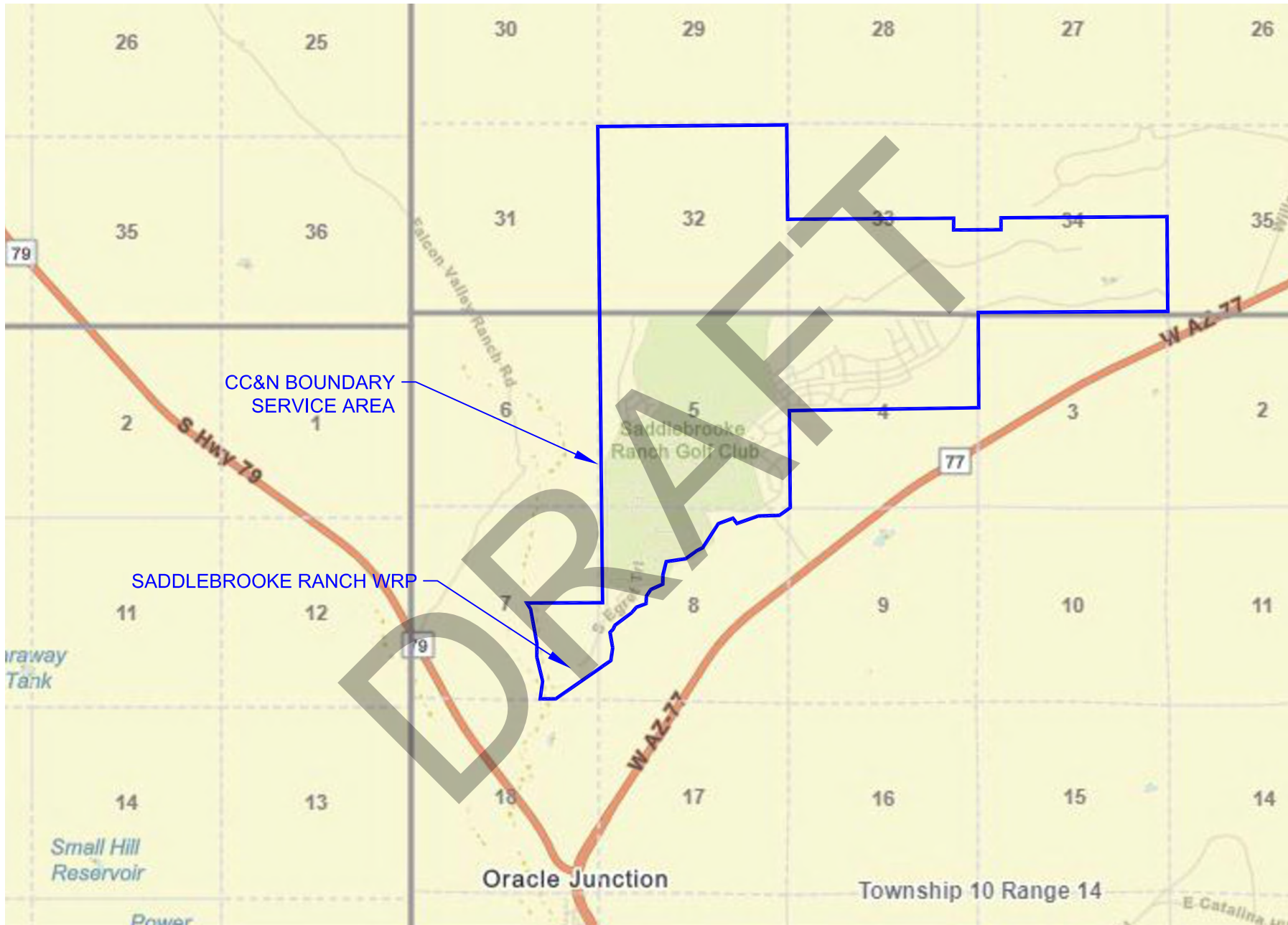
Good Morning Anubhav,
I am looking for TAZ level population growth data to 2060 in the area of Saddlebrooke Ranch (Northeast of Oracle Junction). Could you provide guidance on how I obtain this data?
Thank you,
Brent Emmerton

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APPENDIX G

Maps

DRAFT

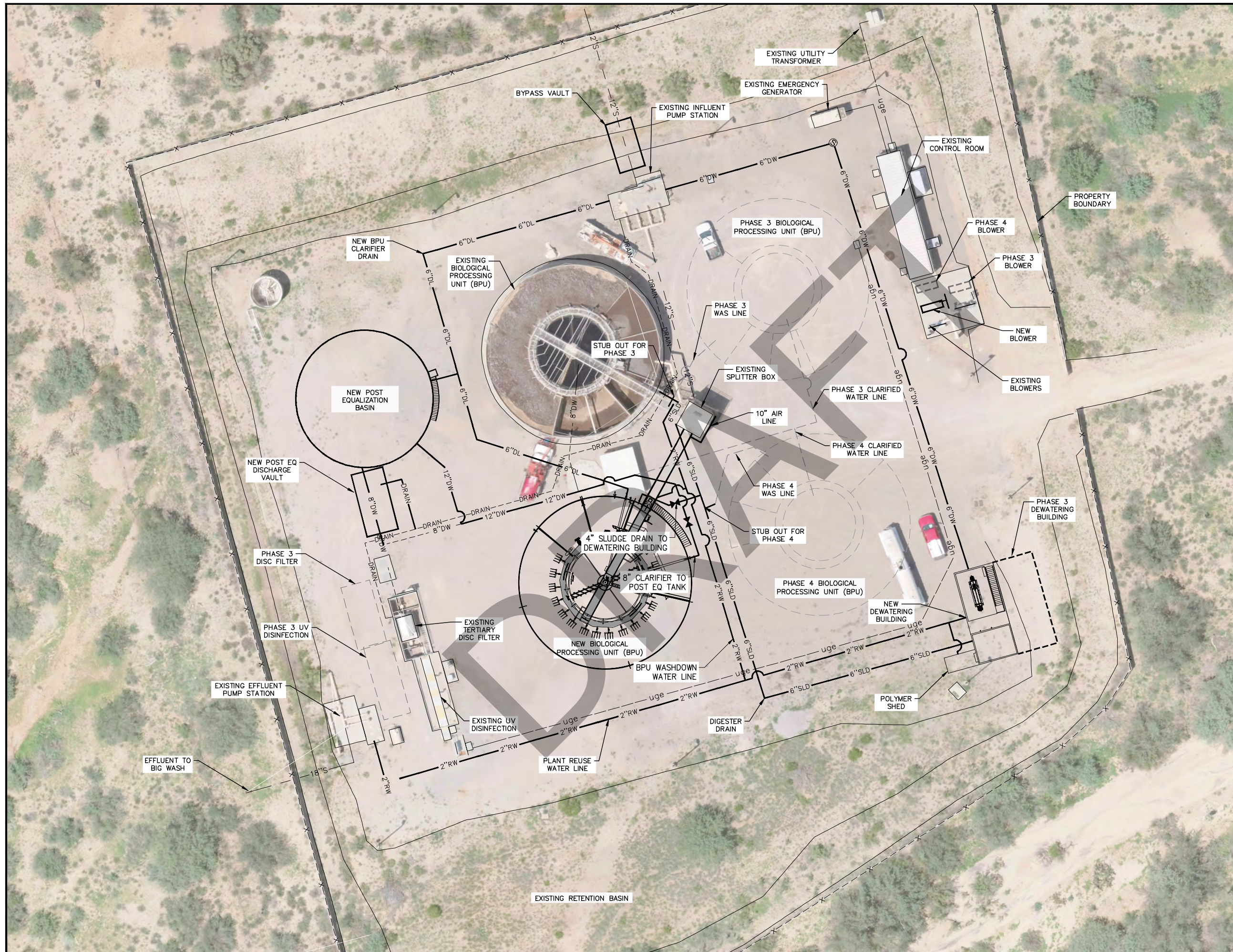


CC&N BOUNDARY
SERVICE AREA

SADDLEBROOKE RANCH WRP

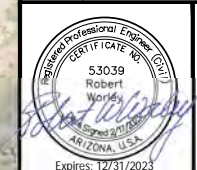
MOUNTAIN PASS UTILITY COMPANY CC&N SERVICE AREA

G:\dwgs\GISR UTIL\SBRC CC&N\Mountain Pass CC&N.dwg



SCALE
0 20' 40'
HORIZ: 1" = 40'

REV. NO.	COMMENT	DATE



SUNRISE ENGINEERING
1180 N MOUNTAIN SPRINGS PKWY
SPRINGVILLE, UTAH 84663
TEL 801.704.5220
www.sunrise-eng.com

MOUNTAIN PASS UTILITY CO.
SADDLEBROOKE WRP EXPANSION
2022
SITE PLAN

SET NO.	DESIGNED	DRAWN	CHECKED	SHEET NO.	P1
08179	EN	EN	DA	7 of 55	

P:\mountain pass utility company\08179 saddlebrooke wrp expansion\Design\DWG\08179 - SITE PLAN_V2.dwg Feb 24, 2023 2:05pm alex.maskovitch

APPENDIX H

Saddlebrooke Ranch WRP APP & AZPDES Permits

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STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-105334
PLACE ID 13097, LTF 53551
SIGNIFICANT AMENDMENT

1.0 AUTHORIZATION

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2 and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A.A.C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, Mountain Pass Utility Company is hereby authorized to operate the SaddleBrooke Ranch Water Reclamation Plant, 59283 East Phoebe Lane, in Pinal County, Arizona, over groundwater of the northern portion of the Upper Santa Cruz Sub-basin, located in the Tucson Active Management Area, in Township 10 S, Range 14 E, Section 07, NE ¼, NE ¼, SW ¼, of the Gila and Salt River Baseline and Meridian.


This permit becomes effective on the date of the Water Quality Division Director's signature and shall be valid for the life of the facility (operational, closure, and post-closure periods) unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant and as determined at the applicable POC occurs as a result of the discharge from the facility.

1.1 PERMITTEE INFORMATION

Facility Name: SaddleBrooke Ranch Water Reclamation Plant (WRP)
Facility Address: 59283 East Phoebe Lane
Tucson, Arizona 85739
County: Pinal
Permittee: Mountain Pass Utility Company
Permittee Address: 9532 E. Riggs Road
Sun Lakes, Arizona 85248
Facility Contact: Steve Soriano, Vice President
Emergency Phone No.: (480) 895-9200
Latitude/Longitude: 32° 34' 21" N/ 110° 56' 00" W
Legal Description: Township 10S, Range 14E, Section 07, of the Gila and Salt River Baseline and Meridian

1.2 AUTHORIZING SIGNATURE



Michael A. Fulton, Director
Water Quality Division
Arizona Department of Environmental Quality

Signed this 4th day of November, 2011

THIS PERMIT SUPERCEDES ALL PREVIOUS PERMITS

2.0 SPECIFIC CONDITIONS [A.R.S. §§ 49-203(4), 49-241(A)]**2.1 Facility / Site Description [A.R.S. § 49-243(K)(8)]**

Mountain Pass Utility Company is authorized to operate the SaddleBrooke Ranch Water Reclamation Plant (WRP) with a design flow of 249,000 gallons per day (gpd). The treatment process includes headworks with a bar rack screen and comminutor, an influent pump station with flow meter, a package plant with anoxic and aerobic zones for nitrification/denitrification, an integral clarifier and an aerobic digester, an equalization basin, an automatic backwash traveling bridge filter, two ultraviolet (UV) disinfection units, an effluent pump station (for distributing reclaimed water), and a centrifuge (for dewatering sludge on-site). The equalization basin, an effluent pump station, and a centrifuge will be installed in the future as per Section 3.0, Compliance Schedule.

Effluent may be discharged by gravity to Big Wash, a tributary to the Cañada del Oro in the Upper Santa Cruz River Basin under a valid AZPDES permit, or used for beneficial purposes under a valid reclaimed water permit (A.A.C. R18-9 Article 7). The WRP is classified for Class B+ reclaimed water according to A.A.C. R18-11, Article 3.

Sludge shall be removed from the clarifier and transferred to the aerobic digester. The sludge shall be pumped from the aerobic digester and hauled to the SaddleBrooke Wastewater Treatment Facility (P-100356), located in Tucson, Arizona, where the sludge shall be managed in accordance with applicable state and federal regulations. In the future, the permittee may install a centrifuge to receive the sludge directly from the aerobic digester for on-site dewatering. According to Compliance Schedule once the dewatering equipment is installed, the permittee shall manage the dewatered sludge in accordance with applicable federal, state, and local regulations.

During the initial start-up period, lasting not more than two (2) years, up to 20,000 gallons per day of wastewater may be vaulted and hauled off-site to an approved facility as per Section 4.1, Table I.

The depth to groundwater is approximately 430 feet below ground surface (bgs) and the direction of groundwater flow is to the southwest.

The WRP was designed and shall be constructed according to plans approved by the ADEQ Wastewater, Recharge and Reuse Unit on October 4, 2005. Design plans pertaining to the addition of noise, odor, and aesthetic controls and the applicable change in the setback requirement, were approved by the ADEQ Technical Support Unit on February 5, 2007. Noise, odor, and aesthetic controls are for future installation (when required). According to Compliance Schedule the 100-foot setback requirement shall apply prior to the sale of residential housing within 500 feet of the treatment and disposal components of the sewage treatment facility.

The site includes the following permitted discharging facilities:

Facility	Latitude	Longitude
SaddleBrooke Ranch Water Reclamation Plant	32° 34' 21" N	110° 56' 00" W
Discharge to Big Wash (AZPDES outfall)	32° 34' 18" N	110° 56' 03" W

This significant permit amendment was initiated by the permittee, Mountain Pass Utility Company, for the purpose of increasing the vault-and-haul provision of the SaddleBrooke Ranch WRP start-up operations from 10,000 gpd to 20,000 gpd, and extending the start-up period for an additional two (2) years.

Annual Registration Fee [A.R.S. § 49-242]

The Annual Registration Fee for this permit is established by A.R.S. § 49-242 and is payable to the Arizona Department of Environmental Quality (ADEQ) each year. The design flow is 0.249 million gallons per day (mgd).

Financial Capability [A.R.S. § 49-243(N) and A.A.C. R18-9-A203]

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee shall maintain financial capability throughout the life of the facility. The estimated dollar amount demonstrated for financial capability was \$200,000 for operating costs and \$50,000 for closing costs. The financial capability was demonstrated through Robson Communities, Inc. (RCI), in support of Mountain Pass Utility Company as per A.A.C. R18-9-203(C)(2).

2.2 Best Available Demonstrated Control Technology [A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

The W RP shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities with a design flow of less than 250,000 gpd as specified in A.A.C. R18-9-B204.

The permittee shall meet the requirements for pretreatment by conducting monitoring as per A.A.C. R18-9-B204(B)(6)(b).

The treatment facility shall not exceed a maximum seepage rate of 550 gallons per day per acre for all containment structures within the treatment works.

2.2.1 Engineering Design

The WRP design report was prepared by L.J. Farrington Engineers, Inc., dated November 10, 2004. The design report in support of the significant permit amendment to add noise, odor, and aesthetic controls and adjust the setbacks was prepared by Michael S. Goldman, P.E., and Water 3 Engineering, Inc., dated January 9, 2007.

2.2.2 Site-specific Characteristics

Not applicable.

2.2.3 Pre-operational Requirements

The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department as per the Compliance Schedule in Section 3.0. The Certificate shall be submitted to the Groundwater Section and a copy shall be sent to the Water Quality Compliance Section.

2.2.4 Operational Requirements

1. Permittee shall maintain a copy of the up-to-date Operations and Maintenance Manual at the WWTP site at all times, and the manual shall be available upon request during inspections by ADEQ personnel.
2. The pollution control structures shall be inspected for the items listed in Section 4.2, Table III - FACILITY INSPECTION (OPERATIONAL MONITORING).
3. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and material(s) used shall be documented on the Self-Monitoring Report Form submitted quarterly to the ADEQ Water Quality Compliance Section.

2.2.5 Reclaimed Water Classification

[A.A.C. R18-9-703(C)(2)(a), A.A.C. R18-11-303 through 307]

The treatment facility is rated as producing reclaimed water meeting the Class B+ Reclaimed Water Quality Standards (A.A.C. R18-11, Article 3) which may be used for any allowable Class A, B, or C use under a valid reclaimed water permit (A.A.C. R18-9, Article 7).

2.2.6 Certified Areawide Water Quality Management Plan Conformance

[A.A.C. R18-9-A201(B)(6)(a)]

Facility operations must conform to the approved Certified Areawide Water Quality Management Plan according to the 208 consistency determination in place at the time of permit issuance.

2.3 Discharge Limitations [A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205(B)]

1. The permittee is authorized to operate the WRP with a maximum average monthly flow of 0.249 mgd.
2. The permittee shall notify all users that the materials authorized to be disposed of through the WRP are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.
3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT pollutant control technologies including liner failure¹, uncontrollable leakage, overtopping (e.g., exceeding the maximum storage capacity, defined as a fluid level exceeding the crest elevation of a permitted impoundment), of basins, lagoons, impoundments or sludge drying beds, berm breaches, accidental spills, or other unauthorized discharges.
4. Specific discharge limitations are listed in Section 4.2, Tables IA and IB.

2.4 Points of Compliance (POCs) [A.R.S. § 49-244]

The POCs are established at the following designated locations:

POC#	POC Locations	Latitude	Longitude
1	Approximately 200 feet west-southwest of the effluent discharge point into Big Wash, and 200 feet from the effluent manhole at the WRP property line.	32° 34' 22" N	110° 56' 13" W

Groundwater monitoring is not required at the point of compliance well, until the flow rate exceeds 247,500 gpd, as a monthly average, as per Section 3.0, Compliance Schedule.

The Director may amend this permit to require installation of wells and initiation of groundwater monitoring at the POC or to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

¹Liner failure in a single-lined impoundment is any condition that would result in leakage exceeding 550 gallons per day per acre.

2.5 Monitoring Requirements [A.R.S. § 49-243(K)(1), A.A.C. R18-9-A206(A)]

All monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. All sampling, preservation and holding times shall be in accordance with currently accepted standards of professional practice. Trip blanks, equipment blanks and duplicate samples shall also be obtained, and Chain-of-Custody procedures shall be followed, in accordance with currently accepted standards of professional practice. The permittee shall develop a site-specific Quality Management Plan (QMP) which describes the sample collection and analysis procedures to ensure that the result of work performed under this permit will satisfy the data quality objectives of the permit. The permittee shall be responsible for the quality and accuracy of all data required by this permit. If a third party collects or analyzes samples on behalf of the permittee, the permittee shall obtain a copy of the third party site-specific QMP. The permittee shall consult with the most recent version of the ADEQ QMP and Title 40, PART 136 of the Environmental Protection Agency's Code of Federal Regulations (CFR) for guidance in this regard. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon Request, these documents shall be made immediately available for review by ADEQ personnel.

2.5.1 Pre-operational Monitoring

During the initial start-up period, the permittee shall monitor the flow rate according to Section 4.1, Table I. Flow rate shall be measured at influent pump station vault of the treatment facility. Monitoring under Section 4.1, Table I shall continue until permittee ceases to vault and haul and initiates routine discharge monitoring under Section 4.2, Table IA or when flow reaches 20,000 gpd, or within two (2) years after the date of permit signature, whichever comes first.

2.5.2 Routine Discharge Monitoring

Upon cessation of the initial start-up period, the permittee shall monitor the effluent on a routine basis according to Section 4.2, Table IA. Representative samples of the effluent shall be collected at the point of discharge from the ultraviolet disinfection unit.

2.5.3 Reclaimed Water Monitoring

On a routine basis, the permittee shall monitor the reclaimed water parameters listed under Section 4.2, Table IB in addition to the routine discharge monitoring parameters listed in Section 4.2, Table IA. Representative samples of the reclaimed water shall be collected at the point of discharge from the ultraviolet disinfection unit.

2.5.4 Facility / Operational Monitoring

Operational monitoring inspections shall be conducted according to Section 4.2, Table III.

1. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented on the SMRF submitted quarterly to the ADEQ Water Quality Compliance Section, Data Unit. If none of the conditions occur, the report shall say "no event" for a particular reporting period. If the facility is not in operation, the permittee shall indicate this on the SMRF.
2. The permittee shall submit data required in Section 4.2, Table III regardless of the operating status of the facility unless otherwise approved by the Department or allowed in this permit.

2.5.5 Groundwater Monitoring and Sampling Protocols

Groundwater monitoring is not required at time of issuance. Groundwater monitoring is required when the facility exceeds the flow limit of 247,500 gpd as a monthly average of daily flows. Within 30 days after such exceedance, the permittee shall submit to the ADEQ Groundwater Section an Other Amendment application to include a design for the POC well at the location designated in Section 2.4.

2.5.6 Surface Water Monitoring and Sampling Protocols

Not applicable.

2.5.7 Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state-approved methods. If no state-approved method exists, then any appropriate EPA-approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of Arizona state-certified laboratories can be obtained at the address below:

Arizona Department of Health Services
Office of Laboratory Licensure and Certification
250 North 17th Avenue
Phoenix, Arizona 85007
Phone: (602) 364-0720

2.5.8. Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the ADEQ Groundwater Section for approval prior to installation and the permit shall be amended to include any new monitoring points.

2.6 Contingency Plan Requirements

[A.R.S. § 49-243(K)(3), (K)(7) and A.A.C. R18-9-A204 and R18-9-A205]

2.6.1 General Contingency Plan Requirements

At least one copy of this permit and the approved contingency and emergency response plan(s) submitted in the application shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall be aware of and follow the contingency and emergency plans.

Any AL exceedance, violation of a DL, AQL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3.

Some contingency actions involve verification sampling. Verification sampling shall consist of the first follow-up sample collected from a location that previously indicated a violation or the exceedance of an AL. Collection and analysis of the verification sample shall use the same protocols and test methods to analyze for the pollutant or pollutants that exceeded an AL or violated an AQL. The permittee is subject to enforcement action for the failure to comply with any contingency actions in this permit. Where verification sampling is specified in this permit, it is the option of the permittee to perform such sampling. If verification sampling is not conducted within the timeframe allotted, ADEQ and the permittee shall presume the initial sampling result to be confirmed as if verification sampling has been conducted. The permittee is responsible for compliance with contingency plans relating to the exceedance of an AL or violation of a DL, AQL, or any other permit condition.

2.6.2 Exceeding of Alert Levels/Performance Levels

2.6.2.1 Exceeding of Performance Levels Set for Operational Conditions

1. If an operational performance level (PL) set in Section 4.2, Table III has been exceeded the permittee shall:
 - a. Notify the ADEQ Water Quality Compliance Section within five days of becoming aware of the exceedance.
 - b. Submit a written report within 30 days after becoming aware of the exceedance. The report shall document all of the following:
 - (1) A description of the exceedance and its cause;
 - (2) the period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;
 - (3) any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;
 - (4) any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
 - (5) any malfunction or failure of pollution control devices or other equipment or process.
2. The facility is no longer on alert status once the operational indicator no longer indicates that a PL is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

2.6.2.2 Exceeding of Alert Levels (ALs) Set for Discharge Monitoring

1. If an AL set in Section 4.2, Table IA has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
 - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
 - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameters in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within 30 days of an AL exceedance, the permittee shall submit the laboratory results to the ADEQ Water Quality Compliance Section, Data Unit, along with a summary of the findings of the investigation, the cause of the exceedance, and actions taken to resolve the problem.
4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

2.6.2.2.1 Exceeding Permit Flow Limit

1. If the AL for average monthly flow in Section 4.1, Table I or Section 4.2, Table IA has been exceeded, the permittee shall submit an application for an APP amendment

to expand the WRF or submit a report detailing the reasons that expansion is not necessary.

2. Acceptance of the report instead of an application for expansion requires ADEQ approval.

2.6.3 Discharge Limit Violation

1. If a DL set in Section 4.1, Table I or Section 4.2, Tables IA or IB has been violated, the permittee shall immediately investigate to determine the cause of the violation. The investigation shall include the following:
 - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
 - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, if necessary to identify the cause of the violation.

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

2. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

2.6.4 Aquifer Quality Limit Violation

Not applicable - Groundwater monitoring is not required under this permit.

2.6.5 Emergency Response and Contingency Requirements for Unauthorized Discharges pursuant to A.R.S. § 49-201(12) and pursuant to A.R.S. § 49-241

2.6.5.1 Duty to Respond

The permittee shall act immediately to correct any condition resulting from a discharge pursuant to A.R.S. § 49-201(12) if that condition could pose an imminent and substantial endangerment to public health or the environment.

2.6.5.2 Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. The permittee shall notify the ADEQ Water Quality Compliance Section within 24 hours of discovering the discharge of hazardous material which (a) has the potential to cause an AWQS or AQL exceedance, or (b) could pose an endangerment to public health or the environment.

2.6.5.3 Discharge of Non-hazardous Materials

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of non-hazardous materials from the facility, the permittee shall promptly attempt to cease the discharge and isolate the discharged material. Discharged material shall be removed and the site cleaned up as soon as possible. The permittee shall notify the ADEQ Water Quality Compliance Section and the within 24 hours of discovering the discharge of non-hazardous material which (a) has the potential to cause an AQL exceedance, or (b) could pose an endangerment to public health or the environment.

2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the ADEQ Water Quality Compliance Section and within 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.6.6 Corrective Actions

Specific contingency measures identified in Section 2.6 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater Section prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of an AL or violation of an AQL, DL, or other permit condition:

1. Control of the source of an unauthorized discharge;
2. Soil cleanup;
3. Cleanup of affected surface waters;
4. Cleanup of affected parts of the aquifer;
5. Mitigation to limit the impact of pollutants on existing uses of the aquifer.

Within 30 days of completion of any corrective action, the operator shall submit to the ADEQ Water Quality Compliance Section, a written report describing the causes, impacts, and actions taken to resolve the problem.

2.7 Reporting and Recordkeeping Requirements [A.R.S. § 49-243(K)(2) and A.A.C. R18-9-A206(B) and R18-9-A207]

2.7.1 Self-monitoring Report Form

1. The permittee shall complete the SMRFs provided by ADEQ, and submit them to the Water Quality Compliance Section, Data Unit.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the SMRF and submit the report to ADEQ. The permittee shall use the format devised by ADEQ.
3. The tables contained in Section 4.0 list the parameters to be monitored and the frequency for reporting results for compliance monitoring. Analytical methods shall be recorded on the SMRFs.
4. In addition to the SMRF, the information contained in A.A.C. R18-9-A206(B)(1) shall be included for exceeding an AL or violation of an AQL, DL, or any other permit condition being reported in the current reporting period.

2.7.2 Operation Inspection / Log Book Recordkeeping

A signed copy of this permit shall be maintained at all times at the location where day-to-day decisions regarding the operation of the facility are made. A log book (paper copies, forms, or electronic data) of the inspections and measurements required by this permit shall be maintained at the location where day-to-day decisions are made regarding the operation of the facility. The log book shall be retained for ten years from the date of each inspection, and upon request, the permit and the log book shall be made immediately available for review by ADEQ personnel. The information in the log book shall include, but not be limited to, the following information as applicable:

1. Name of inspector;
2. Date and shift inspection was conducted;
3. Condition of applicable facility components;
4. Any damage or malfunction, and the date and time any repairs were performed;
5. Documentation of sampling date and time; and
6. Any other information required by this permit to be entered in the log book.

Monitoring records for each measurement shall comply with A.A.C. R18-9-A206(B)(2).

2.7.3 Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Water Quality Compliance Section in writing (by mail or by fax - see Section 2.7.5) within five days (except as provided in Section 2.6.5) of becoming aware of a violation of any permit condition, discharge limitation, or of an AL exceedance.
2. The permittee shall submit a written report to the Water Quality Compliance Section within 30 days of becoming aware of the violation of any permit condition or discharge limitation. The report shall document all of the following:
 - a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
 - b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
 - c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
 - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
 - e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
 - f. Description of any malfunction or failure of pollution control devices or other equipment or processes.

2.7.4 Operational, Other or Miscellaneous Reporting

The permittee shall complete the SMRF provided by the Department to reflect facility inspection requirements designated in Section 4.2, Table III and submit to the ADEQ Water Quality Compliance Section, Data Unit quarterly along with other reports required by this permit. Facility inspection reports shall be submitted no less frequently than quarterly, regardless of operational status.

If the treatment facility is classified for reclaimed water under this permit, the permittee shall submit the reclaimed water monitoring results as required in Section 4.2, Table IB and flow volumes to any of the following in accordance with A.A.C. R18-9-703(C)(2)(c):

1. Any reclaimed water agent who has contracted for delivery of reclaimed water from the permittee; and
2. Any end user who has not waived interest in receiving this information.

2.7.5 Reporting Location

All SMRFs shall be submitted to:

Arizona Department of Environmental Quality
 Water Quality Compliance Section, Data Unit
 Mail Code 5415B-1
 1110 West Washington Street
 Phoenix, Arizona 85007
 Phone (602) 771-4681

All documents required by this permit to be submitted to the Water Quality Compliance Section shall be directed to the following address:

Arizona Department of Environmental Quality
 Water Quality Compliance Section
 Mail Code 5415B-1
 1110 West Washington Street
 Phoenix, Arizona 85007
 Phone (602) 771-4497
 Fax (602) 771-4505

All documents required by this permit to be submitted to the Groundwater Section shall be directed to:

Arizona Department of Environmental Quality
 Groundwater Section
 Mail Code 5415B-3
 1110 West Washington Street
 Phoenix, Arizona 85007
 Phone (602) 771-4428

2.7.6 Reporting Deadline

The following table lists the quarterly report due dates²:

Monitoring conducted during quarter:	Quarterly Report due by:
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30

The following table lists the semi-annual and annual report due dates:

Monitoring conducted:	Report due by:
Semi-annual: January-June	July 30
Semi-annual: July-December	January 30
Annual: January-December	January 30

²A post-mark date no later than the due date is considered meeting the due date requirements under this Section.

2.7.7 Changes to Facility Information in Section 1.0

The Groundwater Section, and the Water Quality Compliance Section, shall be notified within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, or Emergency Telephone Number.

2.8 Temporary Cessation [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A209(A)]

The permittee shall give written notice to the Water Quality Compliance Section before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
2. Correct the problem that caused the temporary cessation of the facility; and
3. Notify the ADEQ Water Quality Compliance Section and the with a monthly facility status report describing the activities conducted on the treatment facility to correct the problem.

At the time of notification the permittee shall submit for ADEQ approval a plan for maintenance of discharge control systems and for monitoring during the period of temporary cessation. Immediately following ADEQ approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. During the period of temporary cessation, the permittee shall provide written notice to the Water Quality Compliance Section of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.9 below.

2.9 Closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(B)]

For a facility addressed under this permit, the permittee shall give written notice of closure to the Water Quality Compliance Section of the intent to cease operation without resuming activity for which the facility was designed or operated.

2.9.1 Closure Plan

Within 90 days following notification of closure, the permittee shall submit for approval to the Groundwater Section, a closure plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

If the closure plan achieves clean-closure immediately, ADEQ shall issue a letter of approval to the permittee. If the closure plan contains a schedule for bringing the facility to a clean-closure configuration at a future date, ADEQ may incorporate any part of the schedule as an amendment to this permit.

2.9.2 Closure Completion

Upon completion of closure activities, the permittee shall give written notice to the Groundwater Section indicating that the approved closure plan has been implemented fully and providing supporting documentation to demonstrate that clean-closure has been achieved (soil sample results, verification sampling results, groundwater data, as applicable). If clean-closure has been achieved, ADEQ shall issue a letter of approval to the permittee at that time. If any of the following conditions apply, the permittee shall follow the terms of post-closure stated in this permit:

1. Clean-closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;
2. Further action is necessary to keep the facility in compliance with AWQS at the applicable POC;

3. Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
4. Remediation or mitigation measures are necessary to achieve compliance with Title 49, Ch. 2; and
5. Further action is necessary to meet property use restrictions.

2.10 Post-closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9 A209(C)]

Post-closure requirements shall be established based on a review of facility closure actions and will be subject to review and approval by the Groundwater Section.

In the event clean-closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Groundwater Section a post-closure plan that addresses post-closure maintenance and monitoring actions at the facility. The post-closure plan shall meet all requirements of A.R.S. §§ 49-201(30) and 49-252 and A.A.C. R18-9-A209(C). Upon approval of the post-closure plan, this permit shall be amended or a new permit shall be issued to incorporate all post-closure controls and monitoring activities of the post-closure plan.

2.10.1 Post-closure Plan

A specific post-closure plan may be required upon the review of the closure plan.

2.10.2 Post-closure Completion

Not required at the time of permit issuance.

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3.0 COMPLIANCE SCHEDULE [A.R.S. § 49-243(K)(5) and A.A.C. R18-9-A208]

For each compliance schedule item listed below, the permittee shall submit the required information, including a cover letter that lists the compliance schedule items, to the Groundwater Section. A copy of the cover letter must also be submitted to the ADEQ Water Quality Compliance Section.

Description	Due by:
<p>The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion (ECC) in a format approved by the Department that confirms that the treatment process components excluding equalization basin, effluent pump-station and centrifuge have been constructed according to the Department-approved design report or plans and specifications, as applicable.</p>	<p>Prior to discharging under this permit and within 90 days of completion of construction.</p>
<p>Notify of cessation of vault and haul.</p>	<p>Within 15 days after the date of flow reaches 20,000 gpd, or two (2) years from the date of permit signature, whichever comes first.</p>
<p>The permittee shall submit a signed, dated, and sealed Engineer's statement that confirms that the following components have been constructed according to the Department-approved design: Equalization Basin Effluent Pump Station (for distribution of reclaimed water) Centrifuge (for on-site sludge de-watering)</p>	<p>Prior to operation of each of these components.</p>
<p>The permittee shall submit a signed, dated, and sealed Engineer's statement that confirms that facility noise, odor, and aesthetic controls have been constructed according to the Department-approved design.</p>	<p>Prior to the sale of residential lots within 500 feet of the treatment and disposal components of the sewage treatment facility.</p>
<p>Groundwater monitoring shall be required when the facility exceeds the flow limit of 247,500 gpd as a monthly average of daily flows. An Other Amendment application shall be submitted including a design for the POC well at the location designated in Section 2.4, a well drilling permit from ADWR, and a schedule for drilling the well and establishing the ambient water quality in the aquifer.</p>	<p>Within 30 days after exceeding 247,500 gpd as a monthly average of daily flows.</p>

4.0 TABLES OF MONITORING REQUIREMENTS

4.1 PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

TABLE I
INITIAL START-UP PLAN³

Sampling Point Number	Sampling Point Identification		Latitude		Longitude
1	Influent pump station vault		32° 34' 22" N		110° 56' 00" W
Parameter	AL ⁴	DL ⁵	Units	Sampling Frequency	Reporting Frequency
Total Flow: Daily ⁶	Not Established ⁷	0.02	mgd ⁸	Everyday	Quarterly

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³ Monitoring under this table shall continue until the flow reaches 20,000 gpd or two (2) years from the date of permit signature, whichever comes first.

⁴ AL = Alert Level

⁵ DL = Discharge Limit

⁶ Flow shall be measured using a continuous recording flow meter that totals the flows daily.

⁷ Not Established means monitoring is required but no limits are specified.

⁸ mgd = million gallons per day

4.0 TABLES OF MONITORING REQUIREMENTS

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA
ROUTINE DISCHARGE MONITORING⁹

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
2	Point of discharge from the UV disinfection unit			32° 16' 20" N	110° 56' 01" W
Parameter	AL	DL ¹⁰	Units	Sampling Frequency	Reporting Frequency
Total Flow ¹¹ : Daily ¹²	Not Established ¹³	Not Established	mgd ¹⁴	Everyday	Quarterly
Total Flow: Monthly Average ¹⁵	0.2475	0.249	mgd	Monthly Calculation	Quarterly
Flow: AZPDES	Not Established	Not Established	mgd	Everyday	Quarterly
Flow: AZPDES Average Monthly	0.2475	0.249	mgd	Monthly Calculation	Quarterly
Total Flow - Reuse Daily	Not Established	Not Established	mgd	Everyday	Quarterly
Total Flow - Reuse Monthly Average	0.2475	0.249	mgd	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not established	800	CFU or MPN ¹⁶	Daily ¹⁷	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week ¹⁸	Not established	200 ¹⁹	CFU or MPN	Daily	Quarterly
Total Nitrogen ²⁰ : Five-sample rolling geometric mean	8.0	10.0	mg/l	Monthly ²¹	Quarterly

⁹ The permittee shall initiate monitoring under this table upon discontinuing monitoring in Section 4.1, Table I.

¹⁰DL = Discharge Limit

¹¹Total flow for all methods of disposal as reuse, and AZPDES.

¹²Flow shall be measured using a continuous recording flow meter which totals the flow daily.

¹³Not Established means monitoring is required but no limits are specified.

¹⁴mgd = million gallons per day

¹⁵Monthly average of daily flow values.

¹⁶CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

¹⁷For fecal coliform, "daily" sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four samples in each week are obtained and analyzed.

¹⁸Week means a seven-day period starting on Sunday and ending on the following Saturday.

¹⁹If at least four (4) of seven (7) samples in a week are equal to or less than 200 CFU or MPN per 100ml, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of seven (7) samples in a week are greater than 200 CFU or MPN per 100 ml, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).

²⁰Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

²¹A five-month geometric mean of the results of the five (5) most recent samples

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA
ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
Metals (total):					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA
ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total) ²²	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

²²Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IB
RECLAIMED WATER MONITORING TABLE - CLASS B+²³

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
2	Point of discharge from the UV disinfection unit		32° 16' 20" N	110° 56' 01" W
Parameter	DL	Units	Sampling Frequency	Reporting Frequency
Total Nitrogen ²⁴ : Five-sample rolling geometric	10.0	mg/l	Monthly	Quarterly
Fecal Coliform: Single-sample maximum	800	CFU or MPN ²⁵	Daily ²⁶	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	200 ²⁷	CFU or MPN	Daily	Quarterly

²³ Reclaimed water monitoring under Table IB shall be performed anytime effluent is discharged to the reuse site according to an approved Reclaimed Water Permit and is *in addition to* routine discharge monitoring.

²⁴ Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

²⁵ CFU = Colony Forming Units per 100 ml: MPN = Most Probable Number per 100 ml.

²⁶ For fecal coliform, "daily" sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four (4) samples in each 7-day period are obtained and analyzed.

²⁷ If at least four (4) of the last seven (7) samples are equal to or less than 200 CFU or MPN per 100 ml, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of the last seven (7) samples are greater than 200 CFU or MPN per 100 ml, report "no" in the appropriate space on the SMRF (indicating that the standard has **not** been met).

4.2 COMPLIANCE (or OPERATIONAL) MONITORING**TABLE II
GROUNDWATER MONITORING**

Not applicable.

**TABLE III
FACILITY INSPECTION (Operational Monitoring)**

Pollution Control Structures/Parameter	Performance Levels	Inspection Frequency	Reporting Frequency
Pump Integrity	Good working condition	Weekly	Quarterly
Treatment Plant Components	Good working condition	Weekly	Quarterly

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5.0 REFERENCES AND PERTINENT INFORMATION

The terms and conditions set forth in this permit have been developed based upon the information contained in the following, which are on file with the Department:

1. APP Application, dated: May 1, 2003 (original APP, Signed 2/7/2005)
November 6, 2006(sig. amend. signed 12/6/2007)
December 15, 2010 (Sig. Amend.)
2. Contingency Plan, dated: May 1, 2003 (original APP)
3. Final Hydrologist Report, dated: October 26, 2005 (original APP)
4. Final Engineering Report, dated: October 6, 2005 (original APP)
January 9, 2007 (significant amendment)
5. Public Notice, dated: October 6, 2005 (original APP)
June 25, 2007 (significant amendment)
August 16, 2011(significant amendment)
6. Public Hearing, dated: Not applicable.
7. Responsiveness Summary, dated: Not applicable.

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6.0 NOTIFICATION PROVISIONS

6.1 Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based upon the amount of daily influent or discharge of pollutants in gallons-per-day (gpd) as established by A.R.S. § 49-242(D).

6.2 Duty to Comply [A.R.S. §§ 49-221 through 263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

6.3 Duty to Provide Information [A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

6.4 Compliance with Aquifer Water Quality Standards [A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an AWQS at the applicable POC for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

6.5 Technical and Financial Capability

[A.R.S. §§ 49-243(K)(8) and 49-243(N) and A.A.C. R18-9-A202(B) and R18-9-A203(E) and (F)]

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(D), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

6.6 Reporting of Bankruptcy or Environmental Enforcement [A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

1. the filing of bankruptcy by the permittee; or
2. the entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

6.7 Monitoring and Records [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.

6.8 Inspection and Entry [A.R.S. §§ 41-1009, 49-203(B), and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3 of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

6.9 Duty to Modify [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices authorized by this permit.

**6.10 Permit Action: Amendment, Transfer, Suspension, and Revocation
[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]**

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Section in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

7.0 ADDITIONAL PERMIT CONDITIONS

7.1 Other Information [A.R.S. § 49-243(K)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

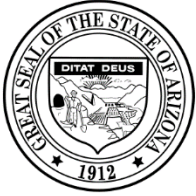
7.2 Severability [A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

7.3 Permit Transfer

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).

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Katie Hobbs
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Karen Peters
Director

July 19, 2023

LTF No. 97213

Brian Smith, Vice President
Mountain Pass Utility Company
c/o Mike Andrews, P.E. B&R Engineering
9532 E. Riggs Road
Sun Lakes, AZ 85248
(Sent via DocuSign)

Re: Mountain Pass Utility Company, SaddleBrooke Ranch Water Reclamation Plant
Minor Modification of AZPDES Permit No. AZ0024775

Dear Brian Smith:

As per A.A.C. R18-9-B906(B), ADEQ has one made minor modification to the AZPDES permit referenced above to correct one typographical error that is outlined below. A corrected permit is provided with this DocuSign email. Please note the minor modification effective date at the bottom of Page 1 and a notice of minor modification replacement page insertion at the top of Page 4. Please use this permit with minor modification as your final copy of the AZPDES permit.

- 1) Page 4. Table 1 Mercury monitoring sample type has been changed from 8-hour composite to Discrete.

If you have any questions please contact me at by phone at 602-771-4144 or by email at hammond.corin@azdeq.gov.

Sincerely,

Corin M. Hammond
Permits Unit
Surface Water Section

Enclosures (2): Modified AZPDES Permit No. AZ0024775
Minor Modification Citation A.A.C. R18-9-B906(B)

cc: Mike Andrews, P.E., B&R Engineering
Chris Montague-Breakwell, Manager, ADEQ Surface Water Permits Unit
Mike Tenczar, ADEQ Surface Water Compliance Data Unit
Gary Sheth, EPA Region 9 Project Officer

Phoenix Office

1110 W. Washington St. | Phoenix, AZ 85007
602-771-2300

Southern Regional Office

400 W. Congress St. | Suite 433 | Tucson, AZ 85701
520-628-6733

azdeq.gov



ADEQ Inventory No.	105334	Permit No.	AZ0024775
LTF No.	97213	Place ID No.	13097

AUTHORIZATION TO DISCHARGE UNDER THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Article 3.1; the Federal Water Pollution Control Act, (33 U.S.C. §1251 *et seq.*, as amended), and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 9 and 10, and amendments thereto the,

Mountain Pass Utility Company
SaddleBrooke Ranch Water Reclamation Plant
9532 E. Riggs Road
Sun Lakes, AZ 85248

is authorized to discharge treated domestic wastewater from the wastewater treatment plant located at the southern terminus of South Egret Trail in the SaddleBrooke Ranch community serving the SaddleBrooke Ranch community in Pinal County, Arizona to Upper Holding Ravine, a tributary to Big Wash, a protected surface water in Arizona that is a Water of the U.S. (WOTUS), in the Santa Cruz Basin at:

Outfall No.	Latitude	Longitude	Legal
001	32° 34' 19.992" N	110° 56' 3.011" W	Township 10 S, Range 14 E, Section 7

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein, and in the attached "Standard AZPDES Permit Conditions."

Annual Registration Fee [A.R.S. 49-255.01 and A.A.C. R18-14-104]

The annual registration fee for this permit is payable to ADEQ each year. The permitted flow for fee calculation is 249,000 gallons per day (gpd). If the facility is not yet constructed or is incapable of discharge at this time, the permittee may be eligible for reduced fees under rule. Send all correspondence requesting reduced fees to the Water Quality Division of ADEQ. Please reference the permit number, LTF number and why reduced fees are requested under rule.

This permit shall become effective on June 06, 2023.

This permit and the authorization to discharge shall expire on June 05, 2028.

Signed May 11, 2023.

DocuSigned by:

7A7C293F922A4A2...

Trevor Baggio, Director
Water Quality Division
Arizona Department of Environmental Quality

Minor Modification Effective Date [July 19, 2023]



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PART I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Effluent Limitations and Monitoring Requirements

- The Permittee shall limit and monitor discharges from Outfall 001 as specified in Table 1 which follows. These requirements are based on a design capacity of 0.249 million gallons per day (MGD).

Table 1. Effluent Limitations and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limitations						Monitoring Requirement (2)(3)	
	Mass Limits (1)			Concentration Limits			Monitoring Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Discharge Flow (MGD)	REPORT (4)	---	REPORT	---	---	---	Continuous	Metered
Biochemical Oxygen Demand (BOD) (5-day)	28 kg/day	42 kg/day	---	30 mg/L	45 mg/L	---	1x/Month	8-hour Composite (5)
BOD (6)	---	---	---	85% REMOVAL MINIMUM	---	---	1x/Month	8-hour Composite
Total Suspended Solids (TSS)	28 kg/day	42 kg/day	---	30 mg/L	45 mg/L	---	1x/Month	8-hour Composite
TSS (6)	---	---	---	85% REMOVAL MINIMUM	---	---	1x/Month	8-hour Composite
<i>E. coli</i>	---	---	---	126 cfu/100 mL (7)	---	575 cfu/100 mL (7)	4x/Month (7)	Discrete
Chlorine, Total Residual (TRC) (8) (9)	8 g/day	---	17 g/day	9 µg/L	---	18 µg/L	1x/Week	Discrete
Copper (10)	7 g/day	---	14 g/day	7.4 µg/L	---	15 µg/L	1x/6 Months	8-hour Composite
Mercury	0.01 g/day	---	0.02 g/day	0.01 µg/L	---	0.02 µg/L	1x/6 Months	Discrete
Zinc (10)	59 g/day	---	119 g/day	63 µg/L	---	126 µg/L	1x/6 Months	8-hour Composite
Hardness (CaCO ₃) effluent (10)	---	---	---	REPORT [mg/L]	---	REPORT [mg/L]	1x/6 Months	8-hour Composite
pH (9)	Not less than 6.5 standard units (S.U.) nor greater than 9.0 S.U.						1x/week	Discrete

Footnotes

- Mass values are to be calculated and reported using the following formulas: 1) Mass in kilograms per day = 3.785 x flow in MGD x concentration in mg/L, and 2) mass in grams per day = 3.785 x flow in MGD x concentration in µg/L. See the definition for "Monthly Average Mass Limit", "Weekly Average Mass Limit", or "Daily Maximum Mass Limit" in Appendix A. See definitions for "Monthly Average Mass Loading", "Weekly Average Mass Loading", and "Daily Maximum Mass Loading" in Appendix A for guidance on DMR reporting of mass-based DMR reporting. All metals effluent Limitations are for total recoverable metals.
- Testing must coincide with the Whole Effluent Toxicity Test (WET) samples, if any, taken during that monitoring period as per Part I.C, Table 3 of the permit. See Part IV of the permit.
- If discharge is infrequent, see Part I.D for minimum effluent characterization monitoring requirements
- Monitoring and reporting required. No limit set at this time. In addition to the average and maximum flows reported on the Discharge Monitoring forms, daily discharge shall be recorded on the Discharge Flow Record provided in Appendix B. See Part II.B. for reporting requirements.
- For the purposes of this permit, a "8-hour composite" sample has been defined as a flow-proportioned mixture of two or more discrete samples (aliquots) obtained at equal time intervals over an 8-hour period. If only two samples are collected, they should be taken approximately 8 hours apart. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling.



- 6 Both the influent and the effluent shall be monitored.
- 7 cfu = colony forming units; "most probable number" (mpn) is considered equivalent for reporting purposes. The monthly average for *E. coli* is calculated as a geometric mean. A minimum of 4 samples (one sample per week of each month) are required in order to report a geometric mean. See the definition for "Monthly or Weekly Average Concentration Limit" in Appendix A.
- 8 Sample when chlorine or bromine compounds are used for disinfection. See Part II.A.7 for specific monitoring requirements for chlorine.
- 9 pH and TRC must be measured at the time of sampling and do not require use of a certified laboratory. Measurements must be obtained in accordance with the applicable method and must meet all method quality assurance/quality control requirements to be considered valid data.
- 10 Limits listed are based on the average effluent hardness of 106 mg/L as CaCO₃. The effluent must be tested for hardness at the same time that the metal sample is taken. Please see the hardness definition in Appendix A, Part B.

B. Trace Substance Monitoring

1. The permittee shall monitor discharges from Outfall 001 as specified in Table 2. Monitoring results above the Assessment Levels (ALs) listed below do not constitute a permit violation, but may trigger evaluation of Reasonable Potential (RP) by ADEQ. The permittee shall use an approved analytical method with a Limit of Quantitation (LOQ) lower than the AL values as described in Part II.A.5.

Table 2. Assessment Level Monitoring

Parameter	Assessment Levels (1) (2)		Monitoring Requirements (3) (4)	
	Monthly Average	Daily Maximum	Monitoring Frequency	Sample Type
Ammonia (5)	REPORT [mg/L] (5)	REPORT [mg/L] (5)	1x/Month	Discrete
Ammonia Impact Ratio (AIR) (6)	1	2	1x/Month	Discrete
Cyanide (as free cyanide)	7.9 µg/L	16 µg/L	1x/6 Months	Discrete
Hydrogen sulfide (7)	2 µg/L	3 µg/L	1x/6 Months	Discrete
Sulfides (7)	REPORT [µg/L] (7)	REPORT [µg/L] (7)	1x/6 Months (7)	Discrete
Oil & Grease	10 mg/L	15 mg/L	1x/Year	Discrete
pH - effluent (5) (8)	REPORT [S.U.] (5)	REPORT [S.U.] (5)	1x/Month	Discrete
Temperature - effluent (5) (8)	REPORT [°C] (5)	REPORT [°C] (5)	1x/Month	Discrete

Footnotes

- 1 Concentration values are calculated based on Arizona Water Quality Standards. Monitoring and reporting required.
- 2 All metals effluent Assessment Levels are for total recoverable metals, except for chromium VI, for which the assessment levels listed are dissolved.
- 3 Testing must coincide with the Whole Effluent Toxicity Test (WET) samples, if any, taken during that monitoring period as per Part I.C, Table 3 of the permit. See Part IV of the permit.
- 4 If discharge is infrequent see Part I.D for minimum effluent characterization monitoring requirements.
- 5 The ammonia assessment level is dependent on pH and temperature. The effluent must be tested for pH and temperature at the same time that the ammonia samples are taken. In addition to reporting the ammonia values on the DMRs, the Ammonia Data Log shall also be completed including values of the effluent. See Part II.B of the permit.
- 6 The Ammonia Impact Ratio (AIR) is calculated as the ratio of the reported effluent ammonia concentration and the calculated ammonia standard as determined by comparing concurrent measurement of the effluent pH and temperature with the values in the ammonia criteria table in Appendix C. In addition to reporting the AIRs on the DMRs, the ammonia data log in Appendix C shall also be completed. See Part II.B of the permit.
- 7 With a detection limit no higher than 100 µg/L, any detection of sulfides shall trigger monitoring for hydrogen sulfide for the remainder of the permit term. Monitoring for hydrogen sulfide is only required if sulfide is detected.
- 8 pH and temperature must be measured at the time of sampling and do not require use of a certified laboratory. Measurements must be obtained in accordance with the applicable method and must meet all method quality assurance/quality control requirements to be considered valid data.



C. Whole Effluent Toxicity Monitoring

1. The permittee shall monitor discharges from Outfall 001 for Whole Effluent Toxicity (WET) as specified in Table 3 which follows. If toxicity is detected above an Action Level specified as follows, the permittee must perform follow-up testing and, as applicable, follow the TIE/TRE processes in Part IV.D of the permit.

Table 3. WET Testing

Effluent Characteristic (1)	Action Levels		Monitoring Requirements	
	Daily Maximum (2) (3)	Monthly Median (3)	Monitoring Frequency (5)	Sample Type
Acute Toxicity (4) <i>Pimephales promelas</i> (Fathead minnow)	N/A	Fail	1x/Permit term	8-hr Composite (7)
Acute Toxicity (4) <i>Ceriodaphnia dubia</i> (Water flea)	N/A	Fail	1x/Permit term	8-hr Composite
Chronic Toxicity <i>Pseudokirchneriella subcapitata</i> (Green algae) (6)	1.6 TUc	1.0 TUc	1x/Permit term	8-hr Composite
Chronic Toxicity <i>Pimephales promelas</i> (Fathead minnow)	1.6 TUc	1.0 TUc	1x/Permit term	8-hr Composite
Chronic Toxicity <i>Ceriodaphnia dubia</i> (Water flea)	1.6 TUc	1.0 TUc	1x/Permit term	8-hr Composite

Footnotes

- 1 See Part IV for additional requirements for testing and reporting Whole Effluent Toxicity (WET).
- 2 Since completion of one chronic WET test takes more than 24 hours, the daily maximum is considered to be the highest allowable test result.
- 3 If chronic toxicity is detected above the Action Levels in this table or an acute test fails, the permittee must perform follow-up testing. See Part IV for details.
- 4 The requirement for an acute test applies when duration of discharge doesn't allow for chronic tests to be conducted. See Part IV.
- 5 If discharge is infrequent see Part I.D for minimum effluent characterization monitoring requirements.
- 6 Formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*.
- 7 For the purposes of this permit, a "8-hour composite" sample has been defined as a flow-proportioned mixture of two or more discrete samples (aliquots) obtained at equal time intervals over an 8-hour period. If only two samples are collected, they should be taken approximately 8 hours apart. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling.



D. Effluent Characterization Testing

- The permittee shall monitor to characterize the facility's effluent for the parameters listed in Tables 4.a – b whether discharging or not. When the facility discharges, monitoring is to be conducted at the frequency indicated in Tables 1 through 3. No limits or ALs are established, but the LOQ must be low enough to allow comparison of the results to the applicable water quality standards (WQS). If a LOQ below the WQS cannot be achieved, then the permittee shall use the method expected to achieve the lowest LOQ, as defined in Appendix A of this permit. Samples are to be representative of any seasonal variation in the discharge:

Table 4.a. Effluent Characterization Testing—General Chemistry and Microbiology

Parameter	Reporting Units	Monitoring Requirements	
		Monitoring Frequency (1)	Sample Type
Ammonia (as N) (2)	mg/L	1x/Quarter	Discrete
Biochemical Oxygen Demand (BOD-5)	mg/L	1x/Quarter	8-hour Composite (6)
Chlorine, Total Residual (TRC) (4)(5)	µg/L	1x/Quarter	Discrete
Dissolved Oxygen (5)	mg/L	1x/Year	Discrete
<i>E. coli</i>	cfu/100 mL (3)	1x/Quarter	Discrete
Nitrate/Nitrite (as N)	mg/L	1x/Quarter	8-hour Composite
Nitrogen, Total Kjeldahl (TKN)	mg/L	1x/Quarter	8-hour Composite
Oil and Grease	mg/L	1x/Year	Discrete
pH (5)	S.U.	1x/Quarter	Discrete
Phosphorus	mg/L	1x/Quarter	8-hour Composite
Temperature (5)	°Celsius	1x/Quarter	Discrete
Total Dissolved Solids (TDS)	mg/L	1x/Quarter	8-hour Composite
Total Suspended Solids (TSS)	mg/L	1x/Quarter	8-hour Composite

Footnotes

- If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 4.a. requirements.
- When sampling for ammonia, temperature and pH must be determined concurrently and the results recorded on the **Ammonia Data Log** provided in Appendix C. See Part II.B for reporting requirements.
- cfu = colony forming units; "most probable number" (mpn) is considered equivalent for reporting purposes
- Sample when chlorine or bromine compounds are used for disinfection. See Part II.A.7 for specific monitoring requirements for chlorine
- Temperature, pH, TRC and dissolved oxygen must be measured at the time of sampling and do not require use of a certified laboratory. See Part II.A.7 for methods of analyses for chlorine. Measurements must be obtained in accordance with the applicable method and must meet all method quality assurance/quality control requirements to be considered valid data.
- For the purposes of this permit, a "8-hour composite" sample has been defined as a flow-proportioned mixture of two or more discrete samples (aliquots) obtained at equal time intervals over an 8-hour period. If only two samples are collected, they should be taken approximately 8 hours apart. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling.



Table 4.b. Effluent Characterization Testing—Selected Metals, Trace Substances and WET

Parameter (1)	Reporting Units	Monitoring Requirements	
		Monitoring Frequency (2)	Sample Type
Antimony	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite (6)
Arsenic	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Barium	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Beryllium	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Boron	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Cadmium	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Chromium (4)	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Chromium VI (4)	µg/L	1x/year in years 2025,2026,2027 of permit term	Discrete
Copper	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Iron	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Hydrogen Sulfide (5)	µg/L	1x/year in years 2025,2026,2027 of permit term	Discrete
Sulfides (5)	µg/L	1x/year in years 2025,2026,2027 of permit term	Discrete
Lead	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Manganese	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Mercury	µg/L	1x/year in years 2025,2026,2027 of permit term	Discrete
Nickel	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Selenium	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Silver	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Thallium	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Zinc	µg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Hardness	mg/L	1x/year in years 2025,2026,2027 of permit term	8-hour Composite
Cyanide (as free cyanide)	µg/L	1x/year in years 2025,2026,2027 of permit term	Discrete
Whole Effluent Toxicity - Chronic (all 3 species) (3)	TUc	1x/Permit term in year 2027	8-hour Composite

Footnotes

- All metals analyses shall be for total recoverable metals, except chromium VI, which is dissolved.
- If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 4.b. requirements.
- If chronic toxicity is detected above the Action Levels specified in Table 3 or an acute test fails, the permittee must perform follow-up testing and, as applicable, follow the TIE/TRE processes in Part IV.E of the permit, whether discharging or not. See Part IV for additional information on requirements for testing and reporting Whole Effluent Toxicity (WET).
- If total chromium exceeds 8 µg/L, the permittee must conduct sampling for chromium VI for the remainder of the permit. Otherwise, monitoring for chromium VI is not required.
- The permittee may initially monitor for sulfide instead of hydrogen sulfide. The limit of quantification shall be no higher than 100 µg/L, and any detection of sulfides shall trigger monitoring for hydrogen sulfide for the remainder of the permit term.
- For the purposes of this permit, a “8-hour composite” sample has been defined as a flow-proportioned mixture of two or more discrete samples (aliquots) obtained at equal time intervals over an 8-hour period. If only two samples are collected, they should be taken approximately 8 hours apart. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling.



E. Surface Water Quality Standards

1. The discharge shall be free from pollutants in amounts or combinations that:
 - a. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
 - b. Cause objectionable odor in the area in which the surface water is located;
 - c. Cause off-flavor in aquatic organisms;
 - d. Are toxic to humans, animals, plants or other organisms;
 - e. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses;
2. The discharge shall be free from oil, grease and other pollutants that float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank or aquatic vegetation.
3. The discharge shall not cause an increase in the ambient water temperature of more than 3.0 degrees Celsius.
4. The discharge shall not cause the dissolved oxygen concentration in the receiving water to fall below 3 mg/L from 3 hours after sunrise to sunset and 1 mg/L from sunset to 3 hours after sunrise, unless the percent saturation of oxygen remains equal to or greater than 90%.

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PART II. MONITORING AND REPORTING

A. Sample Collection and Analysis

1. Samples taken for the monitoring requirements specified in Part I shall be collected at the following locations:
 - a. Influent samples shall be taken after the last addition to the collection system and prior to the first treatment process.
 - b. Effluent samples shall be taken downstream from the last treatment process and prior to mixing with the receiving waters.
2. The permittee is responsible for the quality and accuracy of all data required under this permit.
3. The permittee shall keep a QA Manual on site that describes the sample collection and analyses processes. If the permittee collects samples or conducts sample analyses in house, the permittee shall develop a QA Manual that addresses these activities. If a third party collects and/or analyzes samples on behalf of the permittee, the permittee shall obtain a copy of the applicable QA procedures. The QA Manual shall be available for review by ADEQ upon request. The QA Manual shall be updated as necessary to reflect current conditions, and shall describe the following:
 - a. Project Management, including:
 - i. Purpose of sample collection and sample frequency;
 - ii. When and where samples will be collected;
 - iii. How samples will be collected;
 - iv. Laboratory(s) that will perform analyses;
 - v. Any field tests to be conducted (detail methods and specify equipment, including a description of any needed calibrations); and
 - vi. Pollutants or analytes being measured and for each, the permit-specific limits, Assessment Levels, or thresholds (e.g. the associated detection limits needed).
 - b. Sample collection procedures including:
 - i. Equipment to be used;
 - ii. Type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks);
 - iii. Types, sizes and number of sample bottles needed;
 - iv. Preservatives and holding times for the samples (see methods under 40 CFR 136 or 9 A.A.C. 14, Article 6 or any condition within this permit that specifies a particular test method);
 - v. Chain of Custody procedures.
 - c. Specify approved analytical method(s) to be used and include:
 - i. Limits of Detection (LOD) and Limits of Quantitation (LOQs);
 - ii. Required quality control (QC) results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and
 - iii. Corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.
 - d. How the permittee will perform data review; complete DMRs and records used to report results to ADEQ; resolve data quality issues; and identify limitations on the use of the data.



4. Sample collection, preservation and handling shall be performed as described in 40 CFR 136 including the referenced Edition of *Standard Methods for the Examination of Water and Wastewater*, or by procedures referenced in A.R.S. Title 9, Chapter 14 of the Arizona Department of Health Services (ADHS) Laboratory Licensure rules. The permittee shall outline the proper procedures in the QA Manual, and samples taken for this permit must conform to these procedures whether collection and handling is performed directly by the permittee or contracted to a third-party.
5. Analytical requirements
 - a. The permittee shall use a laboratory licensed by the ADHS Office of Laboratory Licensure and Certification that has demonstrated proficiency within the last 12 months under A.A.C. R9-14-609, for each parameter to be sampled under this permit. However, this requirement does not apply to parameters which require analysis at the time of sample accordance with A.A.C. 36-495.02(A)(3). (These parameters may include flow, dissolved oxygen, pH, temperature, and total residual chlorine.)
 - b. The permittee must utilize analytical methods specified in this permit. If no test procedure is specified, the permittee shall analyze the pollutant using:
 - i. A test procedure listed in 40 CFR 136 which is also approved under A.A.C. R9-14-610 and is sufficiently sensitive in accordance with 40 CFR 136.1(c);
 - ii. An alternative test procedure approved by EPA as provided in 40 CFR 136 and which is also approved under A.A.C. R9-14-610;
 - iii. A test procedure listed in 40 CFR 136, with modifications allowed by EPA or approved as a method alteration by ADHS under A.A.C. R9-14-610C; or
 - iv. If no test procedure for a pollutant is available under (5)(b)(i) through (5)(b)(iii) above, any Method approved under A.A.C. R9-14-610(B) for wastewater may be used, except the use of field kits is not allowed unless otherwise specified in this permit. If there is no approved wastewater method for a parameter, any other method identified in 9 A.A.C. 14, Article 6 that will achieve appropriate detection and reporting limits may be used for analyses.
 - c. For results to be considered valid, all analytical work, including those tests conducted by the permittee at the time of sampling (see Part II.A.4.a), shall meet quality control standards specified in the approved methods.
 - d. The permittee shall use analytical methods with a Limit of Quantitation (LOQ) that is lower than the effluent limitations, Assessments Levels, Action Levels, or other water quality criteria, if any, specified in this permit. If all methods have LOQs higher than the applicable water quality criteria, the Permittee shall use the approved analytical method with the lowest LOQ.
 - e. The permittee shall use a standard calibration curve when applicable to the method, where the lowest standard point is equal to or less than the LOQ.
6. Mercury Monitoring - The permittee shall use an ADHS-certified low-level mercury analytical method such as EPA method 245.7 or 1631E to achieve a reporting limit at or below the discharge limitations or assessment levels for mercury as specified in this permit. The permittee shall also use a "clean hands/dirty hands" sampling technique such as EPA Method 1669 if necessary to achieve these reporting limits.
7. Chlorine Monitoring - Because of the short holding time for chlorine, samples may be analyzed on-site using Hach Method No. 10014. Other methods are also acceptable for chlorine if the Method has a LOQ lower than discharge limits specified in this permit.



8. Metals Analyses - In accordance with 40 CFR 122.45(c), all effluent metals concentrations, with the exception of chromium VI, shall be measured as "total recoverable metals". Discharge Limits and Assessment Levels in this permit, if any, are for total metals, except for chromium VI for which the levels listed are dissolved.

B. Reporting of Monitoring Results

1. The permittee shall report monitoring results on Discharge Monitoring Report (DMR) to the ADEQ electronic submission portal MyDEQ. The permittee shall submit results of all monitoring required by this permit in a format that will allow direct comparison with the limitations and requirements of this permit. If no discharge occurs during a reporting period, the permittee shall specify "No discharge" on the DMR. The results of all discharge analyses conducted during the monitoring period shall be included in determinations of the monthly average and daily maximums reported on the DMRs if the analyses were by methods specified in Part II.A above, as applicable.
2. DMRs and attachments are to be submitted by the 28th day of the month following the end of a monitoring period. For example, if the monitoring period ends January 31st, the permittee shall submit the DMR by February 28th. The permittee shall electronically submit all compliance monitoring data and reports using the myDEQ electronic portal provided by ADEQ. The reports required to be electronically submitted include, but are not limited to, the following:
 - a. Discharge Monitoring Reports
 - b. Whole Effluent Toxicity (WET) reports
 - c. Original copies of laboratory results
 - d. Ammonia data logs
 - e. AZPDES discharge flow records
3. When sampling the effluent for ammonia, the pH and temperature of the effluent must be recorded at the time of sample collection. Results for all three parameters as well as the applicable ammonia standard and the calculated Ammonia Impact Ratio shall be recorded on the **Ammonia Data Log** provided in Appendix C. The effluent ammonia concentrations, effluent pH and temperature, and calculated ammonia impact ratio shall also be recorded on DMRs. The ammonia data log shall be submitted to ADEQ annually using the myDEQ electronic portal provided by ADEQ.
4. If requested to participate, the permittee shall submit the results of the annual NPDES DMR/QA Study to ADEQ and ADHS for all laboratories used in monitoring compliance with this permit by December 31st of each year. The permittee shall also conduct any proficiency testing required by the NPDES DMR-QA Study for those parameters listed in the study that the permittee analyzes in house or tests in the field at the time of sampling (these parameters may include pH and total residual chlorine). All results of the NPDES DMR-QA Study shall be submitted to the email and addresses listed below, or submit by any other alternative mode as specified by ADEQ:

Arizona Department of Environmental Quality
Email: AZPDES@azdeq.gov

Arizona Department of Health Services
Attn: Office of Laboratory Licensure and Certification
250 North 17th Avenue
Phoenix, AZ 85007

5. For the purposes of reporting, the permittee shall use the Limit of Quantitation.



6. For parameters with Daily Maximum Limits or Daily Maximum Assessment Levels in this permit, the permittee shall review the results of all samples collected during the reporting period and report as outlined in Table 5.
7. For parameters with Monthly Average Limits or Monthly Average Assessment Levels in this permit, the permittee shall review the results of all samples collected during the reporting period and report as outlined in Table 6.

Table 5. DMR Reporting Requirements for Daily Maximum Limits and Assessment Levels

For Daily Maximum Limits/Assessment Levels	The Permittee shall Report on the DMR
When the maximum value of any analytical result is greater than or equal to the LOQ	The maximum value of all analytical results
When the maximum value detected is greater than or equal to the laboratory's LOD but less than the LOQ	NODI (Q)
When the maximum value is less than the laboratory's LOD	NODI (B)

Table 6. DMR Reporting Requirements for Monthly Average Limits / Assessment Levels

For Monthly Average Limits/Assessment Levels		The Permittee shall Report on the DMR
If only one sample is collected during the reporting period (weekly, monthly, quarterly, annually, etc.) (In this case, the sample result is also the weekly or monthly average.)	When the value detected is greater than or equal to the LOQ	The analytical result
	When the value detected is greater than or equal to the laboratory's LOD, but less than the LOQ	NODI (Q)
	When the value is less than the laboratory's LOD	NODI (B)
If more than one sample is collected during the reporting period	All samples collected in the same calendar month must be averaged. <ul style="list-style-type: none"> • When all results are greater than or equal to the LOQ, all values are averaged • If some results are less than the LOQ, use the LOD value in the averaging • Use '0' for values less than the LOD 	The highest monthly average which occurred during the reporting period

8. For all field testing, or if the information below is not included on the laboratory reports required by Part II.B.2, the permittee shall attach a bench sheet or similar documentation to each DMR that includes, for all analytical results during the reporting period the following:
 - a. the analytical result,
 - b. the number or title of the approved analytical method, preparation and analytical procedure utilized by the field personnel or laboratory, and the LOD and LOQ for the analytical method for the parameter, and
 - c. any applicable data qualifiers using the most current revision of the Arizona Data Qualifiers (available online at: <http://www.azdhs.gov>)



C. Twenty-four Hour Reporting of Noncompliance

1. The permittee shall orally report to the Emergency Response Unit hotline at (602) 771-2330 any noncompliance that poses imminent threat to the environment or human health within 24 hours from the time the permittee becomes aware of the circumstances. The permittee shall also submit an electronic notification within 5 days of the noncompliance event using the myDEQ electronic portal provided by ADEQ. The permittee shall include in the written notification: a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following instances of noncompliance are subject to the 24-hour and 5-day reporting requirements and must be reported orally to the Emergency Response Unit hotline:

- a. Any unanticipated bypass which exceeds any effluent limitations in the permit,
 - b. Any upset which exceeds any effluent limitation in the permit, or
 - c. Any spill or discharge that poses an imminent threat to human health or the environment.
2. All other instances of noncompliance remain subject to the 24-hour and 5-day reporting requirements, and must call the ADEQ AZPDES hotline at (602) 771-1440. For example, an exceedance of any maximum daily limit for the parameters listed in Part 1.A Table 1 that does not poses an imminent threat to human health or the environment.

D. Retention of Monitoring Records

1. The permittee shall retain the following monitoring records:
 - a. Date, exact location and time of sampling or measurements performed, preservatives used;
 - b. Individual(s) who performed the sampling or measurements;
 - c. Date(s) the analyses were performed;
 - d. Laboratory(s) which performed the analyses;
 - e. Analytical techniques or methods used;
 - f. Chain of custody forms;
 - g. Any comments, case narrative or summary of results produced by the laboratory. These comments should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether analyses met project requirements and 40 CFR 136. If results include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, or holding times and preservation, these records must also be retained.
 - h. Summary of data interpretation and any corrective action taken by the permittee.



PART III. BIOSOLIDS / SEWAGE SLUDGE REQUIREMENTS

Note: “Biosolids” refers to non-hazardous sewage sludge as defined in 40 CFR 503.9 and Arizona Administrative Code (A.A.C.) R18-9-1001.7. Sewage sludge that is hazardous as defined in 40 CFR 261 must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA). Sludge with PCB (polychlorinated biphenyls) levels greater than 50 mg/kg must be disposed of in accordance with 40 CFR 761.

A. Use of Disposal Requirements

1. All biosolids/sewage sludge generated and/or prepared at this facility shall be used or disposed of in compliance with the applicable portions of 18 A.A.C. 9, Article 10 and
2. 40 CFR 503 Subpart C: for biosolids that are placed on the land (surface disposal) for the purpose of disposal (dedicated land disposal sites, lagoons, or monofills).
3. 40 CFR 258: for biosolids disposed of in municipal solid waste landfills; and
4. 40 CFR 257: for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

B. Biosolids Preparer’s Responsibility

1. The permittee is responsible for ensuring that all biosolids/sewage sludge produced or accepted at this facility are used or disposed of in accordance with 40 CFR 503 Subpart C, 257, 258 and 18 A.A.C. 9, Article 10, as applicable, whether the permittee uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal. The permittee is responsible for informing any subsequent transporters, preparers, applicators, and disposers of the requirements that they must meet under 18 A.A.C. 9, Article 10.

C. Duty to Mitigate

1. The permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.

D. General Requirements

1. The permittee shall ensure that:
 - a. No biosolids generated and/or prepared at this facility enter wetlands or other waters of the United States;
 - b. Biosolids treatment, storage, use or disposal does not contaminate surface water or groundwater. (Note: Surface disposal or land treatment sites for biosolids must be permitted under the aquifer protection program per A.A.C. R18-9-1002(E)(2) and may also require a separate AZPDES permit. The permittee shall ensure a site has appropriate permits before directing biosolids to a surface disposal or land treatment site.)
 - c. Biosolids treatment, storage, and use or disposal does not create a nuisance such as malodorous smell or attraction of flies or other disease carrying vectors.
 - d. Biosolids generated and/or prepared at this facility are not applied to the land or placed on a surface disposal site if the biosolids are likely to adversely affect a threatened or endangered species as listed under section 4 of the Endangered Species Act (16 U.S.C 1533), or its designated critical habitat as defined in 16 U.S.C. 1532;



- e. Land application sites receiving bulk biosolids generated and/or prepared at this facility are registered with ADEQ in accordance with A.A.C. R18-9-1004.

E. Biosolids Storage

1. Biosolids shall not be stored on land for over two years from the time they are generated unless permit for surface disposal is obtained per 18 A.A.C. 9, Article 10 and 40 CFR 503 Subpart C, or written notification has been submitted to the ADEQ Surface Water Permits Unit with the information in 40 CFR 503.209(b) that sufficiently demonstrates the need for longer temporary storage.
2. For the protection of public health, biosolids shall not be stored uncovered on-site or off-site unless the permittee can demonstrate that prior to placement in storage:
 - a. Biosolids meet Class A or B pathogen reduction requirements established in A.A.C. R18-9-1006(D) or (E), and
 - b. Biosolids meet one of the vector attraction reduction alternatives in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8).
 - c. For biosolids which are classified as EQ or Class A, or as Class B through pathogen reduction Alternative 1, the permittee must also sample for pathogen reduction following storage and within 30 days prior to reuse/disposal or distribution (see Part III.J.2.d). Sampling before storage shall occur at least at the minimum frequencies given in Part III.I.1, and sampling after storage shall be conducted as specified in Part III.I.4.
3. Prior to storing biosolids at an off-site storage location, the permittee shall notify the ADEQ Surface Water Permits Unit in writing where the biosolids will be stored and the expected date of final use or disposal.

F. Surface Water Protection

1. The permittee must design and operate all on-site treatment, disposal, or storage areas for biosolids to:
 - a. Divert surface run-on from adjacent areas to prevent contact with biosolids;
 - b. Protect the site boundaries from erosion; and
 - c. Prevent any drainage that has contacted biosolids from escaping the site.
2. These features shall be designed to be protective for at least a 25-year 24-hour storm event. If the permittee sends biosolids off-site that are not EQB, the permittee shall ensure all treatment, disposal, or storage areas that receive those biosolids have the same level of protection.

G. Facilities with Pretreatment Programs

1. Permittees with pretreatment programs shall:
 - a. Sample and analyze biosolids for all the priority pollutants listed under Section 307.a.1 of the Clean Water Act, except asbestos. This shall consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan.
 - b. Sample and analyze biosolids quarterly for the following Pollutants of Concern:

Arsenic	Copper	Mercury	Selenium
Cadmium	Cyanide	Molybdenum	Silver
Chromium	Lead	Nickel	Zinc



2. If any biosolids generated and/or prepared at this facility are or will be land applied, the permittee shall design local limits to achieve the ceiling and monthly average pollutant concentration levels for pollutants given in Table 9 of this permit. If pollutants in the biosolids exceed any of these monthly average pollutant concentration levels, the permittee shall revise its local limits as necessary in order to meet these levels.

H. Inspection and Entry

The permittee shall allow, directly or through contractual arrangements with their biosolids management contractors, authorized representatives of ADEQ and EPA to:

1. Enter upon all premises where biosolids are treated, stored, used, or disposed, either by the permittee or by another party to whom the permittee transfers the biosolids for treatment, storage, use, or disposal;
2. Have access to and copy any records that must be kept under the conditions of this permit and per 18 A.A.C. 9, Article 10 (including those in 40 CFR 503 Subpart C) by the permittee or by another party to whom the permittee transfers the biosolids for further treatment, storage, use, or disposal; and
3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by the permittee or by another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

I. General Biosolids Monitoring Requirements (dry weight testing)

1. Biosolids Self-monitoring Frequency
Unless otherwise specified in this permit, the permittee shall conduct self-monitoring events at least at the frequency listed in Table 7 for any sampling required in Part III of this permit.

Table 7. Biosolids Self-Monitoring Frequency

Amount of Biosolids Prepared per Calendar Year (dry metric tons)	Minimum Monitoring Frequency
> 0 to < 290	One sampling event per year
≥ 290 to < 1,500	One sampling event per quarter
≥ 1500 to < 15,000	One sampling event per 60 days
≥ to 15,000	One sampling event per month

2. Sampling and Analysis Method
 - a. The permittee shall ensure biosolids are tested using the methods specified in 40 CFR 503.8, as required in A.A.C. R18-9-1012(G) that are sufficiently sensitive in accordance with 40 CFR 122.21(e)(3). Testing shall be performed at a laboratory operating in compliance with A.R.S. 36-495. Because of the potential for re-growth of pathogens, for Class A or EQ biosolids, samples demonstrating pathogen reduction shall be taken within 30 days before biosolids are shipped off-site, so verification that requirements are met is obtained before the biosolids leave the site.
3. Representative Sampling:
 - a. The permittee shall ensure that sampling conducted during a monitoring period adequately represents the quality of all biosolids used/treated/disposed over the monitoring period. This may entail taking several samples per sampling event and/or sampling more frequently than the minimum specified.



4. Testing Stockpiled/Accumulated Biosolids Prior to Distribution or Use
 - a. If, after treatment, biosolids classified as EQ or Class A, or as Class B demonstrated through Alternative 1, are stockpiled or accumulated on-site prior to reuse/disposal, the permittee shall develop a sampling plan that ensures samples representative of the entire stockpile are collected and analyzed for pathogens within 30 days before distribution or use. The plan shall detail the number and location of samples to be taken from a cross section of each pile or area. The plan must include at least 1 sample for each 0-290 metric dry ton increments. More sampling is appropriate when the biosolids are inconsistent in nature or non-uniformly treated.
 - b. The permittee must collect and analyze representative samples per the sampling plan. Distribution or use/disposal shall not occur until the permittee verifies that the biosolids sampled meet all applicable requirements for its use/disposal.
5. Testing for Hazardous Waste Determination
 - a. The permittee shall test biosolids at least annually, and more frequently as necessary, to determine if biosolids are hazardous in accordance with 40 CFR 261. Initial screening of the biosolids may be conducted by analyzing biosolids for the total amount of a pollutant. This screening test is all that is required each monitoring period if the total amount doesn't exceed the 20X TCLP screening value in Table 8. If the total amount of a pollutant exceeds the 20X TCLP screening value, then the leachable amount must be determined using the Toxicity Characteristic Leaching Procedure (TCLP). The disposal of biosolids that test hazardous is not covered under this permit, and all such biosolids must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).



Table 8. Toxicity Characteristic Leaching Procedure Test

Parameter	TCLP Limit mg/L	20 X TCLP Screening Value mg/kg	Minimal Monitoring Frequency per Generator
Metals			
Arsenic	5	100	1x / year
Barium	100	2000	1x / year
Cadmium	1	20	1x / year
Chromium	5	100	1x / year
Lead	5	100	1x / year
Mercury	0.2	4	1x / year
Selenium	1	20	1x / year
Silver	5	100	1x / year
Volatiles and Semi-Volatiles			
Benzene	0.5	10	1x / year
Carbon Tetrachloride	0.5	10	1x / year
Chlorobenzene	100	2000	1x / year
Chloroform	6	120	1x / year
1,2-Dichloroethane	0.5	10	1x / year
1,1-Dichloroethylene	0.7	14	1x / year
Methyl ethyl ketone	200	4000	1x / year
Tetrachloroethylene	0.7	14	1x / year
Trichloroethylene	0.5	10	1x / year
Vinyl Chloride	0.2	4	1x / year
1,4-Dichlorobenzene	7.5	150	1x / year
o-cresol (1)	200	4000	1x / year
m-cresol (1)	200	4000	1x / year
p-cresol (1)	200	4000	1x / year
Cresol (total) (1)	200	4000	1x / year
2,4-Dinitrotoluene	0.13	2.6	1x / year
Hexachlorobenzene	0.13	2.6	1x / year
Hexachlorobutadiene	0.5	10	1x / year
Hexachloroethane	3	60	1x / year
Nitrobenzene	2	40	1x / year



Parameter	TCLP Limit mg/L	20 X TCLP Screening Value mg/kg	Minimal Monitoring Frequency per Generator
Pentachlorophenol	100	2000	1x / year
Pyridine	5	100	1x / year
2,4,5-Trichlorophenol	400	8000	1x / year
2,4,6-Trichlorophenol	2	40	1x / year
Herbicides / Pesticides			
2,4-D	10	200	1x / year
2,4,5-TP (Silvex)	1	20	1x / year
Chlordane	0.03	0.6	1x / year
Endrin	0.02	0.4	1x / year
Heptachlor	0.008	0.16	1x / year
Heptachlor epoxide	0.008	0.16	1x / year
Lindane	0.44	8.8	1x / year
Methoxychlor	10	200	1x / year
Toxaphene	0.5	10	1x / year

Footnotes

- 1 If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.

J. Biosolids Limitations and Monitoring Requirements for Land Applications

1. The permittee shall monitor biosolids generated and/or prepared at this facility for land application and limit their use as follows (Table 9).
 - a. Metals Concentrations for Land Application - Biosolids shall be sampled for the metals listed in the following table at a frequency not less than the minimum indicated for the amount of biosolids prepared annually. Samples shall be taken after all treatment and blending processes, but prior to land application.
 - b. The permittee shall not land apply biosolids with pollutant concentrations that exceed any of the ceiling concentrations in Table 9. The permittee shall not sell or give away biosolids for land application if pollutant concentrations exceed any of the ceiling concentrations in the following table.
 - c. If biosolids exceed any Ceiling Concentration in the following table, the permittee must:
 - i. Notify the ADEQ Surface Water Permits Unit;
 - ii. Find alternative disposal methods other than land application for the biosolids represented by that sampling event; and
 - iii. Identify the source of the pollutants and take appropriate source control measures to reduce the presence of the pollutant(s) of concern.
 - d. If biosolids exceed a Monthly Average Pollutant Concentration listed in the table in Part III.I.1.a above:
 - i. The biosolids shall not be applied as bulk biosolids to a lawn or garden.



- ii. The biosolids shall not be sold or given away if any annual pollutant loading rate listed in Table 3 of A.A.C. R18-9-1005(D) will be exceeded. The annual pollutant loading rate shall be determined using the methodology in 18 A.A.C. 9, Article 10, Appendix A.
- iii. The biosolids shall not be applied to a site if any cumulative pollutant loading rate in Table 4 of A.A.C. R18-9-1005(D) will be exceeded. The cumulative pollutant loading rate shall be determined using the methodology in A.A.C. R18-9-1005(D).
- e. The permittee shall not apply, sell, or give away biosolids for application to a lawn or garden unless they are Exceptional Quality (EQ) biosolids.
- f. The permittee shall be able to demonstrate that all biosolids meet the definition of EQ biosolids in order to claim exemption from the management practices in A.A.C. R18-9-1007 and R18-9-1008. If claiming biosolids are EQ, during the first two years of EQ biosolids preparation, the permittee shall submit the results of all biosolids testing and details about the pathogen and vector control treatment processes to the ADEQ Surface Water Permits Unit. The permittee shall receive written confirmation from ADEQ that the results demonstrate the biosolids meet EQ requirements prior to selling or giving away or land applying any biosolids for uses requiring an EQ biosolids classification.

Table 9. Metal Concentrations for Land Applications

Pollutant	Ceiling Concentrations (milligrams/ kilogram) (1)	Monthly Average Pollutant Concentrations (milligrams/ kilogram) (1)	Minimum Monitoring Frequency per Volume Prepared Annually
Arsenic	75.0	41.0	0 to < 290 dry metric tons—1 sampling event /year
Cadmium	85.0	39.0	
Chromium	3000.0	Not Applicable	
Copper	4300.0	1500.00	≥ 290 to < 1500 dry metric tons—1 sampling event /quarter
Lead	840.0	300.00	
Mercury	57.0	17.0	≥ 1500 to < 15,000 dry metric tons—1 sampling event/60 days
Molybdenum	75.0	Not Applicable	
Nickel	420.0	420.00	
Selenium	100.0	100.0	≥ 15,000 dry metric tons—1 sampling event /month
Zinc	7500.0	2800.00	

Footnotes

(1) Dry-weight basis.

2. Pathogen Reduction Requirements for Land Application

- a. Biosolids must meet Class A or Class B pathogen reduction requirements established in A.A.C. R18-9-1006 at the time the biosolids are land applied and, if stored uncovered prior to land application, at the time the biosolids are stored. The permittee shall also verify that the reduction is met within 30 days prior to distribution (see Part III.I.4). The permittee shall document and retain records of the treatment used to achieve Class A or Class B pathogen reduction levels and, if demonstrating treatment to Class A, the fecal coliform or *Salmonella sp.* density. Retesting is required within 30 days of distribution for EQ and Class A biosolids and for Class B biosolids if pathogen reduction was demonstrated through Alternative 1.



- b. Biosolids sold or given away in a bag or other container for land application, or applied on a lawn or home garden, shall meet the Class A pathogen reduction requirements established in A.A.C. R18-9-1006(D).
 - c. The permittee shall maintain daily records of the operating parameters for the pathogen reduction treatment alternative used. If using A.A.C. R18-9-1006(D) Alternative 4, the permittee shall demonstrate acceptable levels of enteric virus and viable helminth ova through monitoring.
 - d. Microbiological monitoring for fecal coliforms or *Salmonella sp.* to demonstrate pathogen reduction during a given monitoring period shall be conducted as close to the actual distribution or disposal of the biosolids as feasible. The analytical results must demonstrate effective pathogen reduction is achieved prior to distributing or disposing of the biosolids. If the permittee stores biosolids before they are distributed for use or disposal, microbiological testing must take place within 30 days prior to distribution or disposal.
 - e. In order to demonstrate Class B pathogen reduction using A.A.C. R18-9-1006(E) Alternative 1;
 - i. At least seven individual grab samples must be taken and analyzed for fecal coliform during each monitoring event (unless an alternate sampling plan has been approved by ADEQ).
 - ii. The geometric mean of the results must be <2,000,000 MPN/gram or CFU/gram of total solids (dry-weight basis).
 - iii. Samples are to be taken over a 14-day period to adequately represent sludge variability. (Note: A 'monitoring event' includes the period of time that samples are collected, analyzed, and the sample results provided to the permittee.)
 - f. In order to demonstrate Class A pathogen reduction, in addition to meeting one of the alternative pathogen treatment options in A.A.C. R18-9-1006(D)
 - i. At least seven individual grab samples must be collected and analyzed for fecal coliform during each monitoring event (unless an alternate sampling plan has been approved by ADEQ) and all seven samples must be < 1,000 MPN/gram.; or
 - ii. At least seven individual grab samples must be collected and analyzed for *Salmonella sp.* during each monitoring event (unless an alternate sampling plan has been approved by ADEQ) and each must be <3 MPN/4 grams total solids (dry-weight basis).
 - iii. Samples are to be taken over a 14-day period to adequately represent sludge variability.
 - g. If demonstrating Class A pathogen reduction using A.A.C. R18-9-1006(D) Alternative 4;
 - i. One composite sample consisting of at least seven grab samples must be collected and analyzed for enteric virus during each monitoring event and the arithmetic mean of 4 duplicate analyses of that composite must be < 1 PFU/ 4 grams total solids (dry-weight basis). Grab samples are to be taken over a 14-day period prior to compositing them to adequately represent sludge variability, and the maximum holding time is 2 weeks.
 - ii. One composite sample consisting of at least seven grab samples must be collected and analyzed for viable helminth ova during each monitoring event and the arithmetic mean of 4 duplicate analyses of that composite must be < 1 viable ova/ 4 grams total solids (dry-weight basis). Grab samples are to be taken over a 14-day period prior to compositing them to adequately represent sludge variability.
3. Vector Attraction Reduction Requirements for Land Application
- a. The permittee shall ensure that all biosolids generated and/or prepared at this facility meet the vector attraction reduction requirements established in A.A.C. R18-9-1010 when the biosolids are land-applied. If biosolids are stored uncovered prior to land application, one of the vector attraction reduction alternatives established in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8) must be met prior to storage. The permittee shall document and retain records of the operational parameters or application methods used to achieve the vector attraction reduction requirements.



- b. The permittee shall ensure that all biosolids generated and/or prepared at this facility that are sold or given away in a bag or other container, or applied to a lawn or home garden, meet one of the vector attraction reduction alternatives established in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8). The permittee shall document and retain records of the operational parameters or application methods used to achieve the vector attraction reduction requirements.

K. Management Practices for Land Applications

1. The permittee shall ensure that all non-EQ bulk biosolids generated and/or prepared at this facility are land applied in accordance with the management practices in A.A.C. R18-9-1007, unless the bulk biosolids are land applied for reclamation.
2. If the permittee generates or prepares non-EQ bulk biosolids that are land applied for reclamation, the permittee shall ensure that the biosolids are land applied in accordance with the management practices in A.A.C. R18-9-1008.
3. If the permittee generates or prepares non-EQ biosolids placed in a bag or other container for distribution/land application or reclamation, the permittee shall distribute a label or information sheet to the person receiving the material. This label or information sheet shall contain the information in A.A.C. R18-9-1007(B).

L. Biosolids/Sewage Sludge Limitations and Monitoring Requirements for Surface Disposal

The permittee shall ensure that any sewage sludge or biosolids directed to or placed in a surface disposal unit meets the requirements of 40 CFR 503 Subpart C. The permittee shall also ensure the surface disposal site is permitted under the aquifer protection program and has a valid AZPDES permit prior to disposal of any biosolids in the unit.

M. Biosolids Monitoring Requirements for Disposal in a Municipal Landfill

Biosolids placed in a municipal landfill shall be tested by the Paint Filter Test (method 9095) at the frequency in Table 9 or more often as necessary to demonstrate that there are no free liquids. The permittee shall keep records documenting that biosolids disposed in a municipal landfill did not contain free liquids.

N. On-site Management Plan

1. The permittee shall submit a Management Plan (Plan) within 180 days of permit issuance or maintain a previously submitted Plan for the on-site management operations.
2. This Plan shall detail how sludge/biosolids are managed from the time that they are generated at the facility until they are shipped off-site. The Plan shall give specific protocols to be followed to ensure that the material generated at this facility will consistently meet all applicable requirements in 18 A.A.C. 9, Article 10 and 40 CFR Part 503 Subpart C and the provisions of this permit. The Plan must address issues of potential concern such as storage areas; run-on and run-off control; odor and dust control; and include a professional diagram of facilities/areas used in the operation and the area surrounding the operation. The Plan shall specify how and when representative samples of biosolids will be taken and contain a contingency plan for managing biosolids that exceed the requirements for the expected end use/disposal.



O. Record Keeping

1. The permittee shall collect and retain all biosolids information required by this permit and A.A.C. R18-9-1013(A)(1) through (A)(6) for at least five years.
2. The permittee shall keep analytical test results and all documentation that supports the biosolids classification on-site and available for review.
3. All biosolid records are subject to periodic inspection, and copying by ADEQ.

P. Notification Requirements

1. The permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following:
2. Notification of Noncompliance
 - a. The permittee shall notify ADEQ of any noncompliance with the biosolids provisions of this permit or with 18 A.A.C. 9, Article 10, which may endanger health or the environment. The permittee shall provide the information orally within 24 hours from the time the permittee becomes aware of the circumstances (See Part II.C of this permit.)
 - b. For other instances of noncompliance with the biosolids provisions, the permittee shall notify the ADEQ Surface Water Permits Unit in writing within five working days of becoming aware of the circumstances.
 - c. Permittees shall require their biosolids management contractors to notify ADEQ of any noncompliance within the time-frames specified in Sections P.2.a and b.
3. Notification of Shipment to another State
If biosolids are shipped to another State or to Indian Lands, the permittee shall send a notice of the shipment to the NPDES permitting authorities in the receiving State or Indian Land (the EPA Regional Office for that area and the State/Indian authorities) with a copy to the Arizona Surface Water Permits Unit. The notice shall be sent at least 60 days before the biosolids are planned to be shipped.
4. Notification of Change in Land Application Sites, Applicators, or Disposal Methods
 - a. Prior to sending, placing or applying any bulk biosolids generated and/or prepared at this facility to a site that the permittee has not previously utilized for biosolids use/disposal within the last five years, the permittee must verify that the application site has been registered in accordance with A.A.C. R18-9-1004 and shall notify the ADEQ Surface Water Permits Unit of the planned change. The notification shall include a description and topographic map of the proposed site(s), latitude and longitude coordinates at the center of each field/site, slope of land surface, names and addresses of the applicator(s) and site owner(s), a listing of any state or local permits which must be obtained, a description of the crops or vegetation to be grown at each site, proposed loading rates and determination of agronomic rates.
 - b. Prior to selling or giving away bulk biosolids for land application to an applicator that the permittee has not sold or given biosolids to within the last five years, the permittee shall notify the ADEQ Surface Water Permits Unit of the planned change. The notification shall include: the name, address, and telephone number of the applicator and any agent of the applicator; the name and telephone number of a primary contact person who has specific knowledge of the land application activities of the applicator; and whether the applicator holds a NPDES or AZPDES permit, and, if so, the permit number.



- c. Prior to changing the method of biosolids use, treatment or disposal that was identified in the permittee's application for this permit, the permittee shall notify the ADEQ Surface Water Permits Unit of the planned change in writing. If ADEQ determines that the newly proposed practice is not covered under this permit, the permittee shall request and receive a permit modification prior to making the change.
 - d. The permittee shall keep records of site registration verifications and of all notifications made to ADEQ.
5. Notification of Land Application of Biosolids that Exceed Monthly Average Pollutant Concentrations
The permittee must notify the ADEQ Surface Water Permits Unit and any subsequent biosolids handlers if biosolids generated and/or prepared at this facility do not meet any of the Monthly Average Pollutant Concentration values listed in Table 9. The permittee shall ensure that bulk biosolids exceeding a monthly average pollutant concentration will not be applied to a site if any cumulative pollutant loading rate (Table 4 in A.A.C. R18-9-1005) will be exceeded per A.A.C. R18-9-1005(D)(2).
6. Notification to Subsequent Land Applicators
The permittee shall notify the applicator of all the applicator's requirements under Title 18 Chapter 9 Article 10 including the requirement that the applicator certify that management practices, site restrictions, and any applicable vector attraction reduction requirements have been met.
7. Notification of Surface Disposal
Prior to disposal in a new or previously unreported surface disposal site, the permittee shall notify the Surface Water Permits Unit in writing. Notice shall include a description and a topographic map of the proposed site; the names of the site operator and site owner; whether the site has any permits; and shall include a description of procedures for ensuring public access and grazing restrictions until three years following site closure. The permittee shall not direct biosolids to the surface disposal site without prior written approval from ADEQ.

Q. Annual Report for all Permittees

1. The permittee shall submit an annual biosolids report to ADEQ by February 19 of each year for the period covering the previous calendar year. The report shall be filled out on forms prescribed by ADEQ and shall include.
 - a. The amount of biosolids received/generated the previous calendar year and the amount stored at the beginning and end of the previous calendar year, in dry tons or dry metric tons (prefer metric tons), and the amount distributed.
 - b. The results of all biosolids analytical monitoring conducted during the previous calendar year and copies of the laboratory analytical reports. Metals (other than TCLP metals) shall be reported on a 100% dry weight basis. Note: make certain microbiological testing submitted meets required holding times.
 - c. Descriptions of pathogen reduction methods and vector attraction reduction methods used during the previous calendar year. The permittee must submit sludge processing data used to demonstrate how treatment alternative(s) in A.A.C. R18-9-1006 and R18-9-1010 were attained, (such as time, temperature, percent solids, pH etc.) as applicable.
 - d. Names, mailing addresses, and street addresses of all persons who received biosolids generated and/or prepared at this facility for storage, further treatment, disposal in a municipal waste landfill, or for other use/disposal methods not covered under 40 CFR 258 or 503, and the amount delivered to each.



- e. Except for biosolids that are demonstrated to be EQ, the following information shall be submitted by the permittee for land application sites, unless the permittee requires its biosolids management contractors to report this information directly to ADEQ:
 - i. Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applicator, and site owner;
 - ii. Volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;
 - iii. Crop(s) planted, date of planting, harvesting;
 - iv. For any biosolids exceeding A.A.C. R18-9-1005 Table 2 metals concentrations, the locations of sites where applied and cumulative metals loading at each of these sites to date;
 - v. Certifications of management practices in A.A.C. R18-9-1007 or A.A.C. R18-9-1008; and
 - vi. Certifications of site restrictions in A.A.C. R18-9-1009.
- f. For surface disposal sites, the permittee shall ensure that the following information is submitted, the permittee requires its biosolids management contractors to report this information directly to ADEQ:
 - i. Locations of sites, site operator, site owner, size of parcel on which disposed;
 - ii. Results of any required groundwater monitoring;
 - iii. A description of and certifications of management practices in 40 CFR 503.24; and
 - iv. For closed sites, date of site closure and certifications of management practices for the three years following site closure.

R. Reporting

An electronic copy of the annual report shall be submitted to biosolids@azdeq.gov. ADEQ is developing an electronic reporting portal through myDEQ where all annual reports shall be submitted. ADEQ will notify the permittee that all reports shall be submitted through the electronic portal in accordance with the U.S. EPA's electronic reporting requirements when the myDEQ portal becomes available.



PART IV. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. General Conditions

1. The permittee shall conduct chronic or acute toxicity tests on an 8-hour composite samples of the final effluent at the frequencies specified in Part I. The requirement to conduct chronic toxicity testing is contingent upon the frequency or duration of discharges. See Part IV.C.1 below for details. If chronic testing is conducted a separate acute test is not required. However, the acute endpoint shall be reported from the chronic test.
2. Final effluent samples must be taken following all treatment processes, including chlorination and dechlorination, and prior to mixing with the receiving water. The required WET tests must be performed on unmodified samples of final effluent. WET tests conducted on samples that are dechlorinated after collection are not acceptable for compliance with this permit.
3. Chemical testing for all the parameters listed in Parts I.A and B of this permit whose required sample type is a composite shall be performed on a split of one composite sample taken for an acute WET test or a split of at least one of the three composite samples taken for one chronic WET test. For those parameters listed in Parts I.A and B of this permit whose required sample type is discrete, the testing shall be performed on a discrete sample collected concurrently with one sample, discrete or composite, collected for an acute or chronic WET test.
4. Definitions related to toxicity are found in Appendix A.

B. Acute Toxicity

1. If chronic toxicity testing is not required per Part IV.C.1, the permittee shall conduct 96-hour acute toxicity tests with renewal at 48 hours on two species; *Ceriodaphnia dubia* and *Pimephales promelas* using 100% effluent and a control. The acute test may be completed as a non-renewal 48-hour acute test when a second sample for renewal at 48 hours cannot be taken due to a cessation of the discharge after an acute test has been initiated.
2. The permittee must follow the USEPA 5th edition manual, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012) for all acute toxicity testing. The presence of chronic toxicity shall be estimated as specified in the method for each species tested.
3. The acute toxicity action level is any failing test result. The test fails if survival in 100% effluent is less than 90%, and is significantly different from control survival (which must be 90% or greater), as determined by hypothesis testing. Section 11.3 of the acute manual referenced above must be followed to determine Pass or Fail. Any result of Fail requires follow-up testing per Part IV, Section E.
4. The permittee shall report results as Pass or Fail.



C. Chronic Toxicity

1. The permittee shall conduct short-term chronic toxicity tests on three species: the waterflea, *Ceriodaphnia dubia* (survival and reproduction test); the fathead minnow, *Pimephales promelas* (larval survival and growth test); and the green alga, *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*) (growth test). Since completion of the chronic WET test for *Ceriodaphnia dubia* and *Pimephales promelas* requires a minimum of three samples be taken for renewals, the chronic WET test will not be required during any given monitoring period in which the discharge(s) does not occur over seven consecutive calendar days and is (are) not repeated more frequently than every thirty days, except as specified in Part I.D (chronic WET testing for effluent characterization is required whether discharging or not). The discharge does not have to be continuous to fall under this requirement.
2. The permittee must follow the USEPA 4th edition manual, "*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821-R-02-013) for all chronic compliance toxicity testing.
3. The chronic toxicity action levels are any one test result greater than 1.6 TUc or any calculated monthly median value greater than 1.0 TUc. If chronic toxicity is detected above these values, follow-up testing is required per Part IV, Section E. A chronic toxicity unit (TUc) shall be calculated as $TUc = 100/NOEC$.
4. The chronic WET test shall be conducted using a series of five dilutions and a control. The following dilution series must be used: 12.5, 25, 50, 75, and 100% effluent.

D. Quality Assurance

1. Effluent samples must be maintained between 0 and 6°C from collection until utilized in the toxicity testing procedure. When a composite sample is required, each aliquot making up the composite must be chilled after collection and throughout the compositing period. The single allowable exception is when a grab sample is delivered to the performing laboratory for test initiation no later than 4 hours following the time of collection.
2. Control and dilution water should be receiving water or lab water as appropriate, as described in the 40 CFR Part 136.3 approved method. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.
3. Reference toxicity tests (a check of the laboratory and test organisms' performance) shall be conducted at least 1 time in a calendar month for each toxicity test method conducted in the laboratory during that month. Additionally, any time the laboratory changes its source of test organisms, a reference toxicity test must be conducted before or in conjunction with the first WET test performed using the organisms from the newer source. Reference toxicant testing must be conducted using the same test conditions as the effluent toxicity tests (i.e., same test duration, etc.).
4. If either the reference toxicant test or the effluent test does not meet all test acceptability criteria as specified in the 40 CFR Part 136.3 approved WET methods, then the permittee must re-sample and re-test within 14 days of receipt of the test results. The re-sampling and re-testing requirements include laboratory induced error in performing the test method.



5. The chronic reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method (see Section 10, Table 6 in EPA/821-R-02-013). There are five possible outcomes based on the PMSD result.
 - a. *Unqualified Pass*- The test's PMSD is within bounds and there is no significant difference between the means for the control and the effluent. The regulatory authority would conclude that there is no toxicity.
 - b. *Unqualified Fail*- The test's PMSD is larger than the lower bound (but not greater than the upper bound) in Table 6 and there is a significant difference between the means for the control and the effluent. The regulatory authority would conclude that there is toxicity.
 - c. *No Significant Difference in Test Controls* - The test's PMSD exceeds the upper bound in Table 6 and there is no significant difference between the means for the control and the effluent. The test is considered invalid. An effluent sample must be collected and another toxicity test must be conducted within 14 days of receipt of the test results.
 - d. *Significant Difference in Test Controls* - The test's PMSD exceeds the upper bound in Table 6 and there is a significant difference between the means for the control and the effluent. The test is considered valid. The regulatory authority will conclude that there is toxicity.
 - e. *Very Small but Significant Difference*- The relative difference between the means for the control and effluent is smaller than the lower bound in Table 6 and this difference is statistically significant. The test is acceptable and the NOEC should be determined.

E. Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE) Process

1. If acute or chronic toxicity is detected above a WET action level or Limit specified in this permit and the source of toxicity is known (for instance, a temporary plant upset), the permittee shall conduct one follow-up test within two weeks of receipt of the sample results that exceeded the action level. The permittee shall use the same test and species as the failed toxicity test. For intermittent discharges, the follow-up test shall be conducted whether discharging or not. If toxicity is detected in the follow-up, the permittee shall immediately begin developing a TRE plan and submit the plan to ADEQ for review and approval within 30 days after receipt of the toxic result. Requirements for the development of a TRE are listed in paragraph 3 below. The permittee must implement the TRE plan as approved and directed by ADEQ.
2. If acute or chronic toxicity is detected above an action level or Limit specified in this permit and the source of toxicity is unknown, the permittee shall begin additional toxicity monitoring within two weeks of receipt of the sample results that exceeded the action level. The permittee shall conduct one WET test approximately every other week until either a test exceeds an action level (or limit) or four tests have been completed. The follow-up tests must use the same test and species as the failed toxicity test. For intermittent discharges, the first follow-up test shall be conducted whether discharging or not; the subsequent three follow-up tests shall be conducted during the next three discharge events.
 - a. If none of the four tests exceed a WET action level or limit, then the permittee may return to the routine WET testing frequency specified in this permit.



- b. If a WET action level or limit is exceeded in any of the additional tests, the permittee shall immediately begin developing a TRE plan and submit the plan to ADEQ for review and approval within 30 days after receipt of the toxic result. Requirements for the development of a TRE are listed in subsection 3, below. The permittee must implement the TRE plan as approved and directed by ADEQ.
3. The permittee shall use the EPA guidance manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, 1999 (EPA/833/B-99/002) in preparing a TRE plan. The TRE plan shall include, at a minimum, the following:
 - a. Further actions to investigate and identify the causes of toxicity, if unknown. The permittee may initiate a TIE as part of the TRE process using the following EPA manuals as guidance: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, 1992 (EPA/600/6-91/005F); *Methods for Aquatic Toxicity Identification Evaluations: Phase I, Toxicity Characterization Procedures*, 2nd Edition, 1991 (EPA/600/6-91/003); *Methods for Aquatic Toxicity Identification Evaluations: Phase II, Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993 (EPA/600/R-92/080); and *Methods for Aquatic Toxicity Identification Evaluations: Phase III, Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993 (EPA/600/R-92/081).
 - b. Action the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
 - c. A schedule for implementing these actions.

F. WET Reporting

1. The permittee shall report chronic toxicity results on DMRs in Chronic Toxicity Units (TU_c). The TU_c for DMR reporting shall be calculated as $TU_c = 100/NOEC$.
2. In addition to reporting WET results on DMRs, the permittee shall submit a copy of the full lab report(s) for all WET testing conducted during the monitoring period covered by the DMR. The lab report should report TU_c as 100/NOEC **and** as 100/IC₂₅. If the lab report does not contain any of the following items, then these must also be supplied in a separate attachment to the report: 1) sample collection and test initiation dates, 2) the results of the effluent analyses for all parameters required to be tested concurrently with WET testing as defined in Part I.A and B, Tables 1 and 2, and Part IV.A.3 of this permit, and 3) copies of completed "AZPDES Discharge Flow Records" for the months in the WET monitoring period.
3. WET lab reports and any required additional attachments shall be submitted to ADEQ by the 28th day of the month following the end of the WET monitoring period, or upon request.



PART V. SPECIAL CONDITIONS

A. Operation

1. The permittee shall ensure that the facilities or systems are operated by or under the supervision of an operator currently certified by ADEQ at the level appropriate for the facility or system.

B. Reopener

1. This permit may be modified per the provisions of A.A.C. R18-9-B906, and R18-9-A905 which incorporates 40 CFR Part 122. This permit may be reopened based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if Assessment Levels in this permit are exceeded.

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Appendix A. Part A: Acronyms

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
EQ	Exceptional Quality (biosolids)
AZPDES	Arizona Pollutant Discharge Elimination System
A.R.S.	Arizona Revised Statutes
CFR	Code of Federal Regulations
CFU	Colony Forming Units
Director	The Director of ADEQ or any authorized representative thereof
DMR	Discharge Monitoring Report
EPA	The U.S. Environmental Protection Agency
kg/day	Kilograms per day
MGD	Million Gallons per Day
mg/L	Milligrams per Liter, also equal to parts per million (ppm)
MPN	Most Probable Number
NPDES	National Pollutant Discharge Elimination System
PFU	Plaque-Forming Unit
QA	Quality Assurance
SSU	Sewage Sludge Unit
TBEL	Technology-based Effluent Limitation
µg/L	Micrograms per Liter, also equal to parts per billion (ppb)
WQBEL	Water quality-based Effluent Limitation

Appendix A. Part B: Definitions

Active Sewage Sludge Unit	A sewage sludge unit that has not closed.
Acute Toxicity Test	A test used to determine the concentration of effluent or ambient waters that produces an adverse effect (lethality) on a group of test organisms during a short-term exposure (e.g., 24, 48, or 96 hours). Acute toxicity is measured using statistical procedures (e.g., pint estimate techniques or hypothesis testing) and is reported as PASS/FAIL or in TU _a s, where TU _a = 100LC ₅₀ .
Acute-to Chronic Ratio (ACR)	Is the ratio of the acute toxicity of an effluent or a toxicant to its chronic toxicity. It is used as a factor for estimating chronic toxicity on the basis of acute toxicity data, or for estimating acute toxicity on the basis of chronic toxicity data.
Agronomic Rate	The whole biosolids application rate on a dry-weight basis that meets the following conditions: a.) The amount of nitrogen needed by existing vegetation or a planned or actual crop has been provided, and b.) The amount of nitrogen that passes below the root zone of the crop or vegetation is minimized.
Ammonia Impact Ratio (AIR)	The ratio of the concentration of ammonia in the effluent and the calculated ammonia standard as determined by the use of effluent/receiving water pH and temperature.
Annual Pollutant Loading Rate	The maximum amount of a pollutant that can be applied to an acre or hectare of land during a 365-day period.



Applicator	A person who arranges for and controls the site-specific land application of biosolids in Arizona.
Base Flood	A flood that has a one percent chance of occurring in any given year (or a flood that is likely to occur once in 100 years).
Bulk Biosolids	Biosolids that are transported and land-applied in a manner other than in a bag or other container holding biosolids of 1.102 short tons or 1 metric ton or less.
Chronic Toxicity Test	A test in which sublethal effects (e.g., reduced growth or reproduction) are measured in addition to lethality. Chronic toxicity is measured as $TU_c = 100/NOEC$ or $TU_c = 100/EC_p$ or $100/IC_p$. The IC_p and EC_p value should be the approximate equivalent of the NOEC calculated by hypothesis testing for each test method.
Composite Sample	A sample that is formed by combining a series of individual, discrete samples of specific volumes at specified intervals. Composite samples characterize the quality of a discharge over a given period of time. Although, composite samples can be time-weighted or flow-weighted, this permit requires the collection of flow-proportional composite samples. This means that samples are collected and combined using aliquots in proportion to flow rather than time. Also see Flow-Proportional Composite.
Cumulative Pollutant Loading Rate	The maximum amount of a pollutant applied to land application site.
Daily Maximum Concentration Limit	The maximum allowable discharge of a pollutant in a calendar day as measured on any single discrete sample or composite sample.
Daily Maximum Mass Limit	The maximum allowable total mass of a pollutant discharged in a calendar day.
Daily Mass Loading	The mass loading reported against the daily maximum mass limit. The measured daily pollutant discharges by mass. Use the flow observed on the day of sample collection. If there are multiple samples collected within the monitoring period, calculate the daily mass loading as above for each day sampling occurred. Report the highest mass value.
Discrete or Grab Sample	An individual sample of at least 100 mL collected from a single location, or over a period of time not exceeding 15 minutes.
Dry-Weight Basis	The weight of biosolids calculated after the material has been dried at 105 °C until reaching a constant mass.
Effect Concentration Point (ECP)	A point estimate of the toxicant (or effluent) concentration that would cause an observable adverse effect (e.g., survival or fertilization) in a given percent of the test organisms, calculated from a continuous model (e.g., USEPA Probit Model).
Effluent Dependent Water	Effluent Dependent Water means a surface water or portion of a surface water that consists of a point source discharge without which the surface water would be ephemeral. An effluent dependent water may be perennial or intermittent depending on the volume and frequency of the point source discharge of treated wastewater.
Ephemeral Water	Ephemeral water means a surface water or portion of surface water that flows or pools only in direct response to precipitation.
Exceptional Quality Biosolids	Biosolids certified under R18-9-1013(A)(6) as meeting the pollutant concentrations in R18-9-1005 Table 2, Class A pathogen reduction in R18-9-1006, and one of the vector attraction reduction requirements in subsections R-18-9-1010(A)(1) through R18-9-1010(A)(8).

Flow Proportional Composite Sample	A sample that combines discrete samples collected over time, based on the flow of the discharge being sampled. There are two methods used to collect this type of sample. One collects a constant sample volume at time intervals that vary based on stream flow. The other collects discrete samples that are proportioned into aliquots of varying volumes based on stream flow, at constant time intervals (i.e. flow-weighted composite sample).
Hardness	The sum of the calcium and magnesium concentrations, expressed as calcium carbonate (CaCO ₃) in milligrams per liter.
Hypothesis Testing	A statistical technique (e.g., Dunnetts test) that determines what concentration is statistically different from the control. Endpoints determined from hypothesis testing are NOEC and LOEC. The two hypotheses commonly tested in WET are: Null hypothesis (H ₀): The effluent is not toxic. Alternative hypothesis (H _a): The effluent is toxic.
Impaired Water	Impaired water means a protected surface water for which credible scientific data exists that satisfies the requirements of section 49-232, and that, in the case of waters of the U.S., demonstrate that the water should be identified pursuant to 33 United States Code section 1313(d) and the regulations implementing that statute
Inhibition Concentration (IC)	A point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., USEPA Interpolation Method). IC ₂₅ is a point estimate of the toxicant concentration that would cause a 25% reduction in a non-lethal biological measurement.
Intermittent Water	Intermittent water means a surface water or portion of surface water that flows continuously during certain times of the year and more than in direct response to precipitation, such as when it receives water from a spring, elevated groundwater table or another surface source such as melting snowpack.
Land Application or Land Apply	Spraying or spreading biosolids on the surface of the land, injecting biosolids below the land's surface, or incorporating biosolids into the soil to amend, condition, or fertilize the soil.
Land Treatment Facility	An operation designed to treat and improve the quality of waste, wastewater, or both, by placement wholly or in part on the land surface to perform part or all of the treatment. A land treatment facility includes a facility that performs biosolids drying, processing, or composting, but not land application performed in compliance with 18 A.A.C. 9, Article 10.
LC50	The toxicant (or effluent) concentration that would cause death in 50 percent of the test organisms.
Limit of Quantitation (LOQ)	The minimum levels, concentrations, or quantities of a target variable such as an analyte that can be reported with a specific degree of confidence. The calibration point shall be at or below the LOQ. The LOQ is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed.



Limit of Detection (LOD)	An analyte and matrix-specific estimate of the minimum amount of a substance that the analytical process can reliably detect with a 99% confidence level. This may be laboratory dependent and is developed according to R9014-615(C)(7).
Method Detection Limit (MDL)	See LOD
Mixing Zone	An area where an effluent discharge undergoes initial dilution and may be extended to cover the secondary mixing in the ambient waterbody. A mixing zone is an allocated impact zone where water quality criteria can be exceeded as long as acutely toxic conditions are prevented.
Monthly or Weekly Average Concentration Limit	Other than for bacteriological testing, means the highest allowable average calculated as an arithmetic mean of consecutive measurements made during calendar month or week, respectively. The "monthly or weekly average concentration limit" for <i>E. coli</i> bacteria means the highest allowable average calculated as the geometric mean of a minimum of four (4) measurements made during a calendar month or week, respectively. The geometric mean is the nth root of the product of n numbers. For either method (CFU or MPN), when data are reported as "0" or non-detect then input a "1" into the calculation for the geometric mean.
Monthly Average Mass Limit	The highest allowable value that shall be obtained by taking the total mass discharged during a calendar month divided by the number of days in the month that the facility was discharging.
Monthly Average Mass Loading	The mass loading reported against the monthly average mass limit. The monthly average value shall be determined by the summation of all the measured pollutant discharges by mass divided by the number of days during the month when the measurements were made. If monitoring is required less frequently than monthly, calculate the average monthly mass loading for any month that sampling occurred. Report the highest monthly average within the monitoring period.
Non-wotus protected surface water	Non-wotus protected surface water means a protected surface water that is not a WOTUS.
No Observed Effect Concentration (NOEC)	The highest tested concentration of effluent or toxicant, that causes no observable adverse effect on the test organisms (i.e., the highest concentration of toxicant at which the values for the observed responses are <u>not</u> statistically significant different from the controls).
Pathogen	A disease-causing organism.
Point Estimate Techniques	As Probit, Interpolation Method, Spearman-Karber are used to determine the effluent concentration at which adverse effects (e.g., fertilization, growth or survival) occurred. For example, concentration at which a 25 percent reduction in fertilization occurred.
Point Source	Point Source means any discernible, confined and discrete conveyance, including, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft from which pollutants are or may be discharged to a protected surface water. Point source does not include return flows from irrigated agriculture.
Protected Surface Waters	Protected Surface Waters means waters of the State listed on the protected surface water list under Section 49-221, Subsection G and all WOTUS.



Publicly owned treatment works	Publicly owned treatment works" means a treatment works owned by this state or a municipality of this state as defined in section 502(4) of the clean water act or that discharges to a protected surface water.
Reference Toxicant Test	A toxicity test conducted with the addition of a known toxicant to indicate the sensitivity of the organisms being used and demonstrate a laboratory's ability to obtain consistent results with the test method. Reference toxicant data are part of the routine QA/QC program to evaluate the performance of laboratory personnel and test organisms.
Runoff	Rainwater, leachate, or other liquid that drains over any part of a land surface and runs off of the land surface.
Sewage Sludge Unit	Land on which only sewage sludge is placed for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include navigable waters.
Significant Difference	Defined as statistically significant difference (e.g., 95% confidence level) in the means of two distributions of sampling results.
Single Concentration Acute Test	A statistical analysis comparing only two sets of replicate observations. In the case of WET, comparing only two test concentrations (e.g., a control and 100% effluent). The purpose of this test is to determine if the 100% effluent concentration differs from the control (i.e., the test passes or fails).
Store Biosolids or Storage of Biosolids	The temporary holding or placement of biosolids on land before land application.
Surface Disposal Site	An area of land that contains one or more active sewage sludge units.
Submit	As used in this permit, means post-marked, documented by other mailing receipt, sent electronically, or hand-delivered to ADEQ.
Surface Water Quality Standards	Surface Water Quality Standards means a standard adopted for a protected surface water pursuant to Section 49-221 and, in the case of WOTUS, pursuant to Section 49-222.
Test Acceptability Criteria (TAC)	Specific criteria for determining whether toxicity tests results are acceptable. The effluent and reference toxicant must meet specific criteria as defined in the test method.
Ton	A net weight of 2000 pounds and is known as a short ton.
Total Maximum Daily Loads (TMDLs)	Total Maximum Daily Loads (TMDLs) is an estimation of the total amount of a pollutant from all sources that may be added to a water, while still allowing the water to achieve and maintain applicable surface water quality standards. Each total maximum daily load shall include allocations for sources that contribute the pollutant to the water. Total Maximum Daily Loads for waters of the U.S. shall meet the requirements of section 303(d) of the Clean Water Act (33 USC 1313(d)) and regulations implementing that statute to achieve applicable surface water quality standards.
Total Solids	The biosolids material that remains when sewage sludge is dried at 103° C to 105° C.
Toxic Unit (TU)	A measure of toxicity in an effluent as determined by the acute toxicity units or chronic toxicity units measured. Higher the TUs indicate greater toxicity.
Toxicity Identification Evaluation (TIE)	A set of procedures used to identify the specific chemical(s) causing effluent toxicity.



Toxicity Reduction Evaluation (TRE)	A site-specific study conducted in a stepwise process designed to identify the causative agents of effluent toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity.
Toxicity Test	A procedure to determine the toxicity of a chemical or an effluent using living organisms. A toxicity test measures the degree of effect of a specific chemical or effluent on exposed test organisms.
Vectors	Rodents, flies, mosquitoes, or other organisms capable of transporting pathogens.
Waters of the United States (WOTUS)	Waters of the United States (WOTUS) means protected surface waters that are also navigable waters as defined by Section 502(7) of the Clean Water Act.
Weekly Average Mass Limit	The highest allowable value that shall be obtained by taking the total mass discharged during a calendar week divided by the number of days in the week that the facility was discharging.
Weekly Average Mass Loading	The mass loading reported against the weekly average mass limit. The weekly average value shall be determined by the summation of all the measured pollutant discharges by mass divided by the number of days during the week when the measurements were made.
WOTUS Protected Surface Water	WOTUS protected surface water- means a protected surface water that is a WOTUS.
Whole Effluent Toxicity	The total toxic effect of an effluent measured directly with a toxicity test.



Appendix B. AZPDES Discharge Flow Record

SaddleBrooke Ranch Water Reclamation Plant—AZ0024775		
Discharge to Upper Holding Ravine, tributary to Big Wash the Santa Cruz Basin At:		
Outfall No:	001	
Location:	Township 10 S, Range 14 E, Section 7 Latitude 32° 34' 19.992" N, Longitude 110° 56' 3.0114" W	
Month:		Year:
Date:	Flow Duration ⁽¹⁾ (Total hours per day)	Flow Rate ⁽²⁾ (Total MGD per day)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
Comment:		

Footnotes

- 1 Total time of discharge in hours per day. If actual time is not available, use an estimate of flow duration.
- 2 Report flow discharge in MGD. If no discharge occurs on any given day, report 'ND' for the flow for that day.



Appendix C. Ammonia Data Log

SaddleBrooke Ranch Water Reclamation Plant—AZ0024775					
A	B	C	D	E	F
Date of Sample	Ammonia Concentration (Effluent) (mg/L N)	pH (Effluent) (S.U.)	Temperature (Effluent) (° Celsius)	Ammonia Standard as Determined from Ammonia Criteria Tables (attached)	Ammonia Impact Ratio (Column B / Column E)

Please copy and complete for each month of each year for permit term. Attach any additional pages as necessary.



Appendix C. Continued—Ammonia Special Reporting Requirements

Arizona Administrative Code, Title 18, Chapter 11 Department of Environmental Quality Water Quality Standards contains acute and chronic ammonia standards that are contingent upon temperature and/or pH values. The chronic criteria are more stringent than the acute ammonia criteria, so the effluent ammonia will be compared to the chronic ammonia standards. The table for chronic Aquatic and Wildlife designated uses follow below. The permittee shall refer to this table to determine the ammonia standard that applies each time an ammonia sample is taken. The required minimum discharge sampling permit. The permittee shall record all sampling results for effluent ammonia, effluent pH and temperature at the time of sampling, as well as the applicable ammonia standards, ammonia impact ratios, and sampling dates in the Ammonia Data Log. Additionally, the ammonia impact ratio shall be calculated by dividing the ammonia value by the corresponding ammonia standard. Anytime an ammonia impact ratio is found to be above the limit of 1.0 for the pH and temperature at the time the sample was taken, the permittee shall highlight this on the ammonia data log. These results shall also be reported on DMRs with any exceedances noted. Annual submittal of the ammonia data log is required (See Part II.B.3)

A&W Designated Uses

Determination of Chronic Total Ammonia Criteria as N in mg / L Based on pH and Temperature at Time of Sampling (1) (2)										
pH	Temperature, °C									
	0	14	16	18	20	22	24	26	28	30
6.5	6.7	6.7	6.1	5.3	4.7	4.1	3.6	3.2	2.8	2.5
6.6	6.6	6.6	6.0	5.3	4.6	4.1	3.6	3.1	2.8	2.4
6.7	6.4	6.4	5.9	5.2	4.5	4.0	3.5	3.1	2.7	2.4
6.8	6.3	6.3	5.7	5.0	4.4	3.9	3.4	3.0	2.6	2.3
6.9	6.1	6.1	5.6	4.9	4.3	3.8	3.3	2.9	2.6	2.3
7.0	5.9	5.9	5.4	4.7	4.2	3.7	3.2	2.8	2.5	2.2
7.1	5.7	5.7	5.2	4.5	4.0	3.5	3.1	2.7	2.4	2.1
7.2	5.4	5.4	5.0	4.3	3.8	3.3	2.9	2.6	2.3	2.0
7.3	5.1	5.1	4.6	4.1	3.6	3.1	2.8	2.4	2.1	1.9
7.4	4.7	4.8	4.3	3.8	3.3	3.0	2.6	2.3	2.0	1.7
7.5	4.4	4.4	4.0	3.5	3.1	2.7	2.4	2.1	1.8	1.6
7.6	4.0	4.0	3.6	3.2	2.8	2.5	2.2	1.9	1.7	1.5
7.7	3.6	3.6	3.3	2.9	2.5	2.2	1.9	1.7	1.5	1.3
7.8	3.2	3.2	2.9	2.5	2.2	2.0	1.7	1.5	1.3	1.2
7.9	2.8	2.8	2.5	2.2	2.0	1.7	1.5	1.3	1.2	1.0
8.0	2.4	2.4	2.2	1.9	1.7	1.5	1.3	1.2	1.0	0.90
8.1	2.1	2.1	1.9	1.7	1.5	1.3	1.1	1.0	0.88	0.77
8.2	1.8	1.8	1.6	1.4	1.3	1.1	0.97	0.86	0.75	0.66



Determination of Chronic Total Ammonia Criteria as N in mg / L Based on pH and Temperature at Time of Sampling (1) (2)										
pH	Temperature, °C									
	0	14	16	18	20	22	24	26	28	30
8.3	1.5	1.5	1.4	1.2	1.1	0.94	0.83	0.73	0.64	0.56
8.4	1.3	1.3	1.2	1.0	0.91	0.80	0.70	0.62	0.54	0.48
8.5	1.1	1.1	0.99	0.87	0.77	0.67	0.59	0.52	0.46	0.40
8.6	0.92	0.92	0.84	0.74	0.65	0.57	0.50	0.44	0.39	0.34
8.7	0.78	0.78	0.71	0.62	0.55	0.48	0.42	0.37	0.33	0.29
8.8	0.66	0.66	0.60	0.53	0.46	0.41	0.36	0.32	0.28	0.24
8.9	0.57	0.57	0.51	0.45	0.40	0.35	0.31	0.27	0.24	0.21
9.0	0.49	0.49	0.44	0.39	0.34	0.30	0.26	0.23	0.20	0.18

Footnotes

- 1 pH and temperature are field measurements taken at the same time and location as the water samples destined for the laboratory analysis of ammonia.
- 2 If field measured pH and/or temperature values fall between the Chronic Total Ammonia tabular values, round field measured values according to standard scientific rounding procedures to nearest tabular value to determine the ammonia standard.

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**Appendix D. Standard AZPDES Permit Conditions & Notifications**

(Updated as of February 2, 2004)

1. Duty to Reapply—[R18-9-B904(B)]

Unless the Permittee permanently ceases the discharging activity covered by this permit, the Permittee shall reapply, submit a new application, 180 days before the existing permit expires. ADEQ must receive the new application at least 180 days before permit expiration in order to start the re-application process.
2. Applications—[R18-9-A905(A)(1)(C) which incorporates 40CFR 122.22]
 - a. All applications shall be signed as follows:
 - i. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - A. A president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy-or decision-making functions for the corporation, or
 - B. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - ii. For partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - iii. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
 - b. All reports required by permits and other information requested by the Director shall be signed by a person described in paragraph (a) of this Section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described in paragraph (a) of this section;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
 - iii. The written authorization is submitted to the Director.
 - c. Changes to Authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.



- d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3. Duty to Comply - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(i) and A.R.S. §49- 262, 263.01, and 263.02.]
- a. The Permittee shall comply with all conditions of this permit and any standard and prohibition required under A.R.S. Title 49, Chapter 2, Article 3.1 and A.A.C. Title 18, Chapter 9, Articles 9 and 10. For discharges to a WOTUS, any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
 - b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.
 - c. The Permittee shall comply with the effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulation that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
 - d. Civil Penalties. A.R.S. § 49-262(C) provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
 - e. Criminal Penalties. Any a person who violates a condition of this permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 9, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.
4. Need to Halt or Reduce Activity Not a Defense - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(c)]
- It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
5. Duty to Mitigate - R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(d)]
- The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
6. Proper Operation and Maintenance - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(e)]
- The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.



7. Permit Actions - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(f)]

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

8. Property Rights - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(g)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Duty to Provide Information - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(h)]

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

10. Inspection and Entry [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(i)]

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms of the permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring equipment or control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and A.A.C. Title 18, Chapter 9, Articles 9 and 10, any substances or parameters at any location

11. Monitoring and Records - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(j)]

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application, except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - i. The date, exact place and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) the analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.



- d. Monitoring must be conducted according to test procedures specified in this permit. If a test procedure is not specified in the permit, then monitoring must be conducted according to test procedures approved under A.A.C. R18-9-A905(B) including those under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 (for sludge).
- e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both for first conviction. For a second conviction, such a person is subject to a fine of not more than \$20,000 per day of violation, or imprisonment for not more than four years, or both.

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Signatory Requirement - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(k)]
 - a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22 incorporated at R18-9-A905(A)(1)(c))
 - b. The CLEAN WATER ACT provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four years, or both.
13. Reporting Requirements - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(l)]
 - a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations of additions to the permitted facility. Notice is required only when:
 - i. The alteration or addition to a permitted facility that discharges to a WOTUS, may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (incorporated by reference at R18-9-A905(A)(1)(e)); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at R18-9-A905(A)(3)(b)).
 - iii. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
 - b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
 - c. Transfers. (R18-9-B905) This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under Arizona Revised Statutes and the Clean Water Act.



- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - i. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
 - ii. If the Permittee monitors any pollutant more frequently than required by the permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR, or sludge reporting form specified by the Director.
 - iii. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
 - e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
 - f. Twenty-four hour reporting.
 - i. The Permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - ii. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - A. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g) which is incorporated by reference at R18-9-A905(A)(3)(a)).
 - B. Any upset which exceeds any effluent limitation in the permit.
 - C. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at R18-9-A905(A)(3)(d)).
 - g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.
 - h. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
14. Bypass - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(m)]
- a. Definitions
 - i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
 - ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.



- b. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (c) and (d) of this section.
 - c. Notice.
 - i. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of bypass.
 - ii. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph (f)(2) of section 13 (24-hour notice).
 - d. Prohibition of bypass.
 - i. Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
 - A. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - B. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - C. The Permittee submitted notices as required under paragraph (c) of this section.
 - ii. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (d)(1) of this section.
15. Upset - [A.R.S. §§49-255(8) and 255.01(E), R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(n)]
- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
 - b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - c. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defenses of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The Permittee submitted notice of the upset as required in paragraph (f)(2) of Section 13 (24-hour notice).
 - iv. The Permittee has taken appropriate measure including all reasonable steps to minimize or prevent any discharge or sewage sludge use or disposal that is in violation of the permit and that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d).



- d. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

16. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers - [R18-9-A905(A)(3)(b) which incorporates 40 CFR 122.42(a)]

In addition to the reporting requirements under 40 CFR 122.41(l) (which is incorporated at R18-9-A905(A)(3)(a)), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 µg/l);
 - ii. hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - iii. Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7) (which is incorporated at R18-9-A905(A)(1)(b)); or
 - iv. The level established by the Director in accordance with 40 CFR 122.44(f) (which is incorporated at R18-9-A905(A)(3)(d)).
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/l);
 - ii. One milligram per liter (1 mg/l) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7)(which is incorporated at R18-9-A905(A)(1)(b));
 - iv. The level established by the Director in accordance with 40 CFR 122.44(f) (which is incorporated at R18-9-A905(A)(3)(d)).

17. Publicly Owned Treatment Works - [R18-9-A905(A)(3)(b) which incorporates 40 CFR 122.42(b)]

This section applies only to publicly owned treatment works as defined at ARS § 49-255(5).

- a. All POTW's must provide adequate notice to the Director of the following:
 - i. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the CLEAN WATER ACT if it were directly discharging those pollutants; and
 - ii. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - iii. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharge from the POTW.

Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 - 261.33. The Domestic Sewage Exclusion (40



CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

18. Reopener Clause - [R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44(c)]

This permit shall be modified or revoked and reissued to incorporate any applicable effluent standard or limitation or standard for sewage sludge use or disposal under sections 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 405(d) which is promulgated or approved after the permit is issued if that effluent or sludge standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant or sludge use or disposal practice not limited in the permit.

19. Privately Owned Treatment Works - [R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44]

This section applies only to privately owned treatment works as defined at 40 CFR 122.2.

- a. Materials authorized to be disposed of into the privately owned treatment works and collection system are typical domestic sewage. Unauthorized materials are hazardous waste (as defined at 40 CFR Part 261), motor oil, gasoline, paints, varnishes, solvents, pesticides, fertilizers, industrial wastes, or other materials not generally associated with toilet flushing or personal hygiene, laundry, or food preparation, unless specifically listed under "Authorized Non-domestic Sewer Dischargers" elsewhere in this permit.
- b. It is the Permittee's responsibility to inform users of the privately owned treatment works and collection system of the prohibition against unauthorized materials and to ensure compliance with the prohibition. The Permittee must have the authority and capability to sample all discharges to the collection system, including any from septic haulers or other unsewered dischargers, and shall take and analyze such samples for conventional, toxic, or hazardous pollutants when instructed by the permitting authority. The Permittee must provide adequate security to prevent unauthorized discharges to the collection system.
- c. Should a user of the privately owned treatment works desire authorization to discharge non-domestic wastes, the Permittee shall submit a request for permit modification and an application, pursuant to 40 CFR 122.44(m), describing the proposed discharge. The application shall, to the extent possible, be submitted using ADEQ Forms 1 and 2C, unless another format is requested by the permitting authority. If the privately owned treatment works or collection system user is different from the Permittee, and the Permittee agrees to allow the non-domestic discharge, the user shall submit the application and the Permittee shall submit the permit modification request. The application and request for modification shall be submitted at least 6 months before authorization to discharge non-domestic wastes to the privately owned treatment works or collection system is desired.

20. Transfers by Modification - [R18-9-B905]

Except as provided in section 21, a permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made under R18-9-B906, to identify the new Permittee and incorporate such other requirements as may be necessary.

21. Automatic Transfers [R18-9-B905]

An alternative to transfers under section 20, any AZPDES permit may be automatically transferred to a new Permittee if:

- a. The current Permittee notifies the Director at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement between the existing and new Permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and



- c. The Director does not notify the existing Permittee and the proposed new Permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under R18-9-B906(B).

22. Minor Modification of Permits [R18-9-B906(B)]

Upon the consent of the Permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following public notice procedures under R18-9-A907 or A908. Minor modifications may only:

- a. Correct typographical errors;
- b. Update a permit condition that changed as a result of updating an Arizona water quality standard;
- c. Require more frequent monitoring or reporting by the Permittee;
- d. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;
- e. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in their permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Director.
- f. Change the construction schedule for a discharger that discharges to a WOTUS which is a new source. No such change shall affect a discharger's obligation prior to discharge under 40 CFR 122.29 (which is incorporated by reference in R18-9-A905(A)(1)(e)).
- g. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with the permit limits.
- h. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 and 403.18 as enforceable conditions of the POTW's permit.
- i. Annex an area by a municipality.

23. Termination of Permits - [R-9-B906(C)]

The following are causes for terminating a permit during its term, or for denying a permit renewal application:

- a. Noncompliance by the Permittee with any condition of the permit;
- b. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time;
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, a plant closure or termination of discharge by connection to a POTW).

24. Availability of Reports - [Pursuant to A.R.S. § 49-205]

Except for data determined to be confidential under A.R.S. § 49-205(A), all reports prepared in accordance with the terms of this permit shall be available for public inspection at ADEQ offices. As required by A.R.S. § 49-205(B) and (C), permit applications, permits, and effluent data shall not be considered confidential.



25. Removed Substances - [Pursuant to Clean Water Act Section 301]

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

26. Severability - [Pursuant to A.R.S § 49-324(E)]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

27. Civil and Criminal Liability - [Pursuant to A.R.S § 49-262, 263.01, and 263.02]

Except as provided in permit conditions on "Bypass" (Section 14) and "Upset" (Section 15), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.

28. Oil and Hazardous Substance Liability - [Pursuant to Clean Water Act Section 311].

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

29. State or Tribal Law - [Pursuant to R 18-9-A904 (C)].

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

DRAFT

CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER POLLUTION CONTROL

- a. Modified individual permit. The Director shall reopen only the modified conditions when preparing a new draft permit and process the modifications.
 - b. Revoked and reissued individual permit.
 - i. The permittee shall submit a new application.
 - ii. The Director shall reopen the entire permit just as if the permit had expired and was being reissued.
 3. During any modification, or revocation and reissuance proceeding, the permittee shall comply with all conditions of the existing permit until a new final permit is issued.
- B. Minor modifications.**
1. Upon consent of the permittee, the Director may make any of the following modifications to an individual permit:
 - a. Correct typographical errors;
 - b. Update a permit condition that changed as a result of updating an Arizona water quality standard;
 - c. Require more frequent monitoring or reporting by the permittee;
 - d. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;
 - e. Allow for a change in ownership or operational control of a facility, if no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director;
 - f. Change the construction schedule for a new source discharger. The change shall not affect a discharger's obligation to have all pollution control equipment installed and in operation before the discharge;
 - g. Delete a point source outfall if the discharge from that outfall is terminated and does not result in a discharge of pollutants from other outfalls except under permit limits;
 - h. Incorporate conditions of a POTW pretreatment program approved under 40 CFR 403.11 and 40 CFR 403.18, which is incorporated by reference in R18-9-A905(A)(7)(b) as enforceable conditions of the permit, and
 - i. Annex an area by a municipality.
 2. Any modification processed under subsection (B)(1) is not subject to the public notice provision under R18-9-A907 or public participation procedures under R18-9-A908.
- C. Permit termination.**
1. The Director may terminate an individual permit during its term or deny reissuance of a permit for any of the following causes:
 - a. The permittee's failure to comply with any condition of the permit;
 - b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant fact;
 - c. The Director determined that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
 - d. A change occurs in any condition that requires either a temporary or permanent reduction or elimination of any discharge, sludge use, or disposal practice controlled by the permit, for example, a plant closure or termination of discharge by connection to a POTW.
 2. If the Director terminates a permit during its term or denies a permit renewal application for any cause listed in subsection (C)(1), the Director shall issue a Notice of Intent to Terminate, except when the entire discharge is terminated.
 - a. Unless the permittee objects to the termination notice within 30 days after the notice is sent, the termination is final at the end of the 30 days.
 - b. If the permittee objects to the termination notice, the permittee shall respond in writing to the Director within 30 days after the notice is sent.
 - c. Expedited permit termination. If a permittee requests an expedited permit termination procedure, the permittee shall certify that the permittee is not subject to any pending state or federal enforcement actions, including citizen suits brought under state or federal law.
 - d. The denial of a request for termination is not subject to public notice, comment, or hearing under R18-9-A907 and R18-9-A908(A) and (B).
- Historical Note**
New Section made by final rulemaking at 7 A.A.R. 5879, effective December 7, 2001 (Supp. 01-4).
- R18-9-B907. Individual Permit Variances**
- A.** The Director may grant or deny a request for any of the following variances:
1. An extension under section 301(i) of the Clean Water Act (33 U.S.C. 1311) based on a delay in completion of a POTW;
 2. After consultation with EPA, an extension under section 301(k) of the Clean Water Act (33 U.S.C. 1311) based on the use of innovative technology;
 3. A variance under section 316(a) of the Clean Water Act (33 U.S.C. 1326) for thermal pollution, or
 4. A variance under R18-11-122 for a water quality standard.
- B.** The Director may deny, forward to EPA with a written concurrence, or submit to EPA without recommendation a completed request for:
1. A variance based on the economic capability of the applicant under section 301(c) of the Clean Water Act (33 U.S.C. 1311); or
 2. A variance based on water quality related effluent limitations under 302(b)(2) (33 U.S.C. 1312) of the Clean Water Act.
- C.** The Director may deny or forward to EPA with a written concurrence a completed request for:
1. A variance based on the presence of fundamentally different factors from those on which an effluent limitations guideline is based; and
 2. A variance based upon water quality factors under section 301(g) of the Clean Water Act (33 U.S.C. 1311).
- D.** If the Department approves a variance under subsection (A) or if EPA approves a variance under subsection (B) or (C), the Director shall prepare a draft permit incorporating the variance. Any public notice of a draft permit for which a variance or modification has been approved or denied shall identify the applicable procedures for appealing the decision.



	Information Only
✘	Motion to Approve

Date: October 10, 2024

To: Andrea Robles / EPC

From: Steve Abraham, AICP, Transportation & Water Quality Planning Director

Subject: CAG 208 ID #2023-02, TRI-CITY REGIONAL SANITARY DISTRICT, MIAMI, AZ CAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT.

Staff Recommended Motion:

I Move the CAG EPC recommend approval of case #2023-02 Tri-City Regional Sanitary District’s (TRSD) 208 Plan Amendment to the CAG Section 208 Water Quality Management Plan to CAG Management Committee as presented in the staff report.

Summary Discussion:

The purpose of this hearing is to discuss and comment on the Tri-City Regional Sanitary District’s (TRSD) DRAFT 208 Plan Amendment to the CAG Section 208 Water Quality Management Plan. The meeting will address the identification of a new location for the proposed wastewater treatment facility that was approved in the previous plan amendment; expand the current DMA Boundary to include the parcel of the new location site; and approve the new discharge location point due to the new proposed location.

Upon completion, approximately 4,200 residents will directly benefit from this new wastewater collection and treatment system and the entire community will begin to see some environmental and economical improvements in the area. This project consists of the installation of 159,276+/- linear feet (LF) of gravity main lines, 27,500+/- LF of force main, approximately 415 new manholes, about 2,159 new service connections, and a newly constructed 0.50 million gallons per day (MGD) membrane bioreactor (MBR) WRF. Exhibit 2 Preliminary Collection & Treatment System (Appendix G) illustrates the proposed project phasing and infrastructure.

All generated domestic wastewater flows will be conveyed to the new TRSD WRF, which will be designed to have treatment capacity of 0.50 MGD at full buildout. The WRF will be owned, operated, and maintained by TRSD, and TRSD will be responsible for the effluent management.

Staff Concerns/Items for Discussion:

Staff have no additional concerns or recommended changes.

**Alternate Motions*

**With Changes:*

I Move the CAG EPC recommend approval of case #2023-02 Tri-City Regional Sanitary District (TRSD) to proceed to Management Committee as presented in the staff report with the following

Amendments:

1.

2.

Etc.

**Continuance:*

I Move the CAG EPC continue case #2023-02 Tri-City Regional Sanitary District (TRSD) to date & time certain) to address to following concerns:

1.

2.

Etc.

**Deny*

I Move the CAG EPC to recommend denial of case #2023-02 Tri-City Regional Sanitary District (TRSD) with the following findings:

(please cite a minimum of three findings)

**Draft Section 208 Water Quality Management Plan Amendment
CAG 208 ID # 2023-02**

**Tri-City Regional Sanitary District
Wastewater Collection and Treatment System
Designated Management Agency
Gila County, Arizona**

September 2023

Prepared For (Applicant):



Tri-City Regional Sanitary District (TRSD)
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Prepared By:



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PACE JN B708

This plan supersedes Tri-City Regional Sanitary Districts previous CAG 208 Plan Amendment (CAG 208 ID # 2017-02).

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Appendix F Communications
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Appendix H Affected Population
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DRAFT

Abbreviations

AAC	Arizona Administrative Code
ACC Title 18 EQ	Arizona Administrative Code Title 18 Environmental Quality
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
APP	Aquifer Protection Permit
ARS	Arizona Revised Statutes
AZPDES	Arizona Pollutant Discharge Elimination System
BADCT	Best Available Demonstrated Control Technology
BMP	Best Management Practices
BHP	BHP Billiton
CAG	Central Arizona Governments
CDP	Census Designated Places
CFR	Code of Federal Regulations
CVCC	Cobre Valley Country Club
CVSD	Cobre Valley Sanitary District
CWA	Clean Water Act
DMA	Designated Management Area
EA	Environmental Assessment
EDU	Equivalent Dwelling Unit
EPA	Environmental Protection Agency
FMI	Freeport McMoRan Inc.
GCWD	Gila County Wastewater Division
Globe	City of Globe
IGA	Intergovernmental Agreement
IPR	Improvements on Possessory Rights
LF	Linear Feet
MBR	Membrane Bioreactors
MGD	Million Gallons per Day
MHI	Median Household Income
Miami	Town of Miami
MLSS	Mixed-Liquor Suspended Solids
NOV	Notice of Violation
NPV	Net Present Value
O&M	Operation and Maintenance
PACE	Pacific Advanced Civil Engineering, Inc.
PCWWTF	Pinal Creek Wastewater Treatment Facility
PER	Preliminary Engineering Report
PPM	Parts per Million

PSD.....	Pinal Sanitary District
RCAC.....	Rural Communities Assistance Corporation
RD.....	Rural Development
RFC.....	Reconstruction Finance Corporation
ROI.....	Resolution of Intention
ROW.....	Right-of-Way
RUS.....	Rural Utilities Service
RWAA.....	Rural Water Association of Arizona
SF.....	Square Feet
SWPPP.....	Stormwater Pollution Prevention Plan
TRSD.....	Tri-City Regional Sanitary District
USACE.....	United States Army Corp of Engineers
USCB.....	United States Census Bureau
USDA.....	United States Department of Agriculture
USPW.....	Uniform Series Present Worth
WIFA.....	Water Infrastructure Finance Authority of Arizona
WQARF.....	Pinal Creek Water Quality Assurance Revolving Fund
WQMP.....	Water Quality Management Plan
WRF.....	Water Reclamation Facility
WWTP.....	Wastewater Treatment Plant

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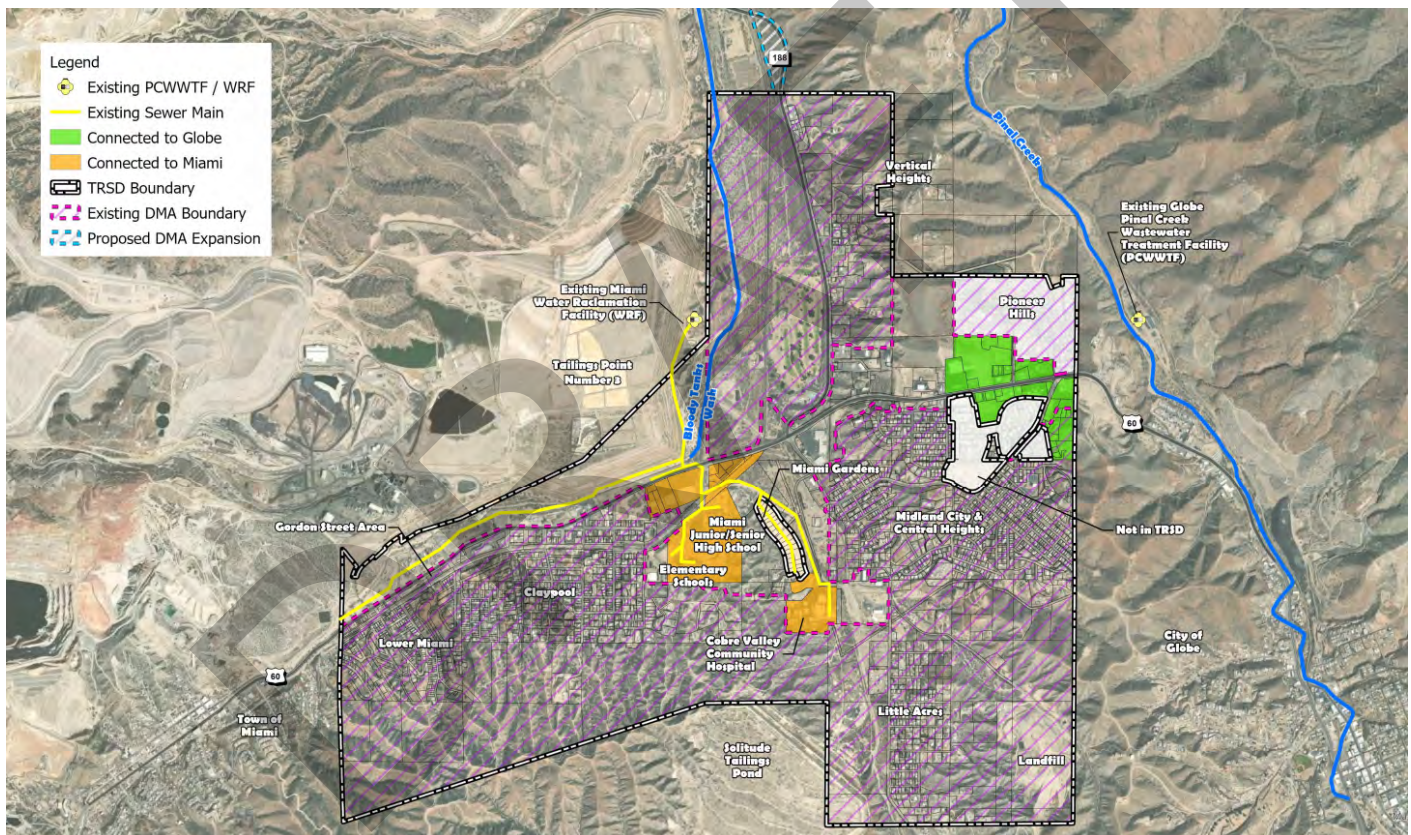
1 Introduction

The Tri-City Regional Sanitary District (TRSD) is seeking approval of an amendment to the Central Arizona Governments (CAG) Section 208 Water Quality Management Plan (WQMP). This plan supersedes Tri-City Regional Sanitary Districts previous CAG 208 Plan Amendment (CAG 208 ID # 2017-02). The purpose of this plan is to:

1. Identify a new location for the proposed wastewater treatment facility that was approved in the previous plan amendment;
2. Expand the current DMA Boundary to include the parcel of the new location site;
3. Approve the new discharge location point due to the new proposed location.

TRSD encompasses approximately 5.3 square miles located in Gila County, Arizona between the Town of Miami (Miami) and City of Globe (Globe). This area is located about 80 miles east of the City of Phoenix. TRSD, an Arizona Sanitary District established in 2011, was formed with a foundation and mission to improve quality of life for the Tri-City area of southern Gila County, Arizona by developing a plan to provide and manage a new wastewater collection and treatment system. Appendix includes formation documentation and the TRSD legal description. Figure 1 below and Exhibit 1 (Appendix G) illustrates the existing facilities.

Figure 1 – TRSD Existing Facilities



1.1 Abstract

TRSD was formed by the merger of two existing sanitary districts known as Cobre Valley Sanitary District (CVSD) and Pinal Sanitary District (PSD), established in 1969 and 1982, respectively. In 2011, the Gila County Board of Supervisors called for an election proposing the merger of these two sanitary districts for convenience and necessity to address the public health concerns in the area. This election resulted in the formal merger whereby CVSD and PSD became TRSD. TRSD had a surveyor formally prepare a legal description of the TRSD boundary in 2018, which is recorded with Gila County. Appendix D includes the following:

- 1969 Cobre Valley Sanitary District Formation Documents
- 1982 Pinal Sanitary District Formation Documents
- 2011 TRSD Formation Res 001 Merger of CVSD & PSD
- 2018 TRSD Boundary Legal Description & Recording

Due to the merger of CVSD and PSD, TRSD now administers both of the recognized designated management agencies (DMAs). Currently, the CAG Section 208 WQMP dated February 2016 identifies PSD and CVSD as DMAs of their respective existing boundaries. PSD's DMA designation was recognized in 1983 and CVSD's in 1985. The TRSD administration of these existing DMAs is supported by a clarification issued to CAG by Arizona Department of Environmental Quality (ADEQ) (Appendix F). It should be noted that historically, no official action was taken by TRSD to obtain approval of its DMA because the DMA of the newly formed sanitary district was simply the combination of the existing DMA's of CVSD and PSD. Therefore, at the time official action by CAG and the EPA was not pursued. Recently, TRSD has worked with neighboring communities of Globe and Miami to negotiate specific areas of the DMA boundaries (details discussed in Section 2.1.6). The certified and recorded TRSD legal description and DMA boundary map is included in Appendix D.

TRSD is seeking approval of an amendment to the Central Arizona Governments (CAG) Section 208 Water Quality Management Plan (WQMP). This plan supersedes Tri-City Regional Sanitary Districts previous CAG 208 Plan Amendment (CAG 208 ID #2017-02). The purpose of this plan is to:

1. Identify a new location for the proposed wastewater treatment facility that was approved in the previous plan amendment;
2. Expand the current DMA Boundary to include the parcel of the new location site;
3. Approve the new discharge location point due to the new proposed location.

TRSD and BHP were in conversations about the use of Gila County Assessor's parcel number 207-23-001C, the parcel previously identified in CAG 208 Plan Amendment ID #2017-02, as a potential site to locate the TRSD WRF, however, it has been determined that it would most likely conflict with the upcoming Solitude Tailings Pond Dam modifications that BHP needs to complete.

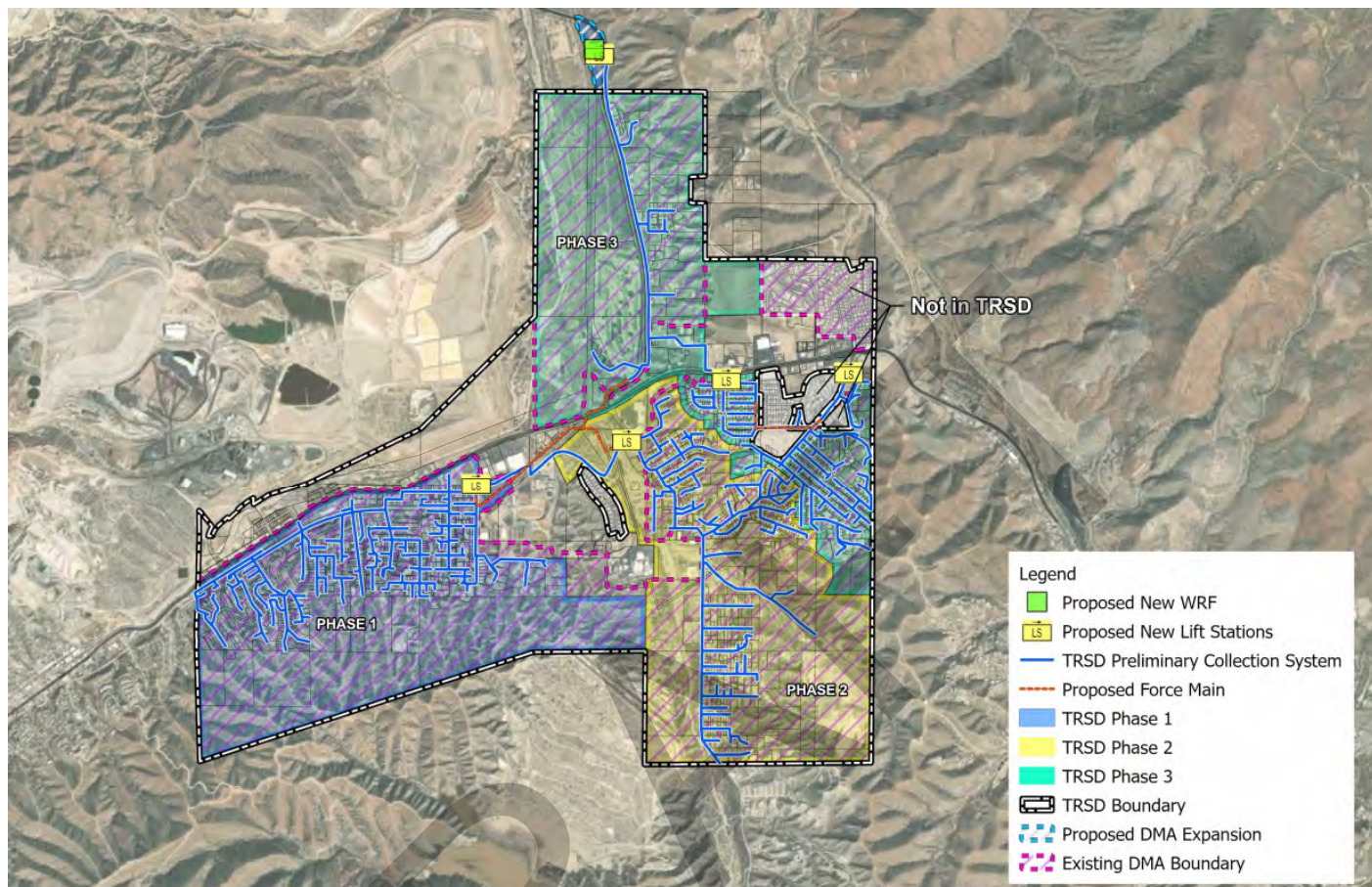
Since learning this parcel was no longer available, TRSD continued its search for a new site and has now identified and is in the process of acquiring a parcel from BHP, via donation, for the proposed new WRF. The property is Gila County Assessor's parcel number #205-03-010. The parcel has been split and recorded in Gila County. The legal description is for the site is included in Appendix D. TRSD is requesting to expand the DMA to include this parcel.

Additionally, with the site change, will be a new discharge location point. This is shown in Exhibit 3 Proposed Project WRF (Appendix G). TRSD is seeking the approval of this new discharge location point.

Section continued on next page.

In the pursuit of funding, due to the magnitude of the overall project, it will be implemented with a three-phase approach. See Figure 2 below and Exhibit 2 (Appendix G).

Figure 2 – Preliminary Collection System



Upon completion, approximately 4,200 residents will directly benefit from this new wastewater collection and treatment system and the entire community will begin to see some environmental and economical improvements in the area. This project consists of the installation of 159,276+/- linear feet (LF) of gravity main lines, 27,500+/- LF of force main, approximately 415 new manholes, about 2,159 new service connections, and a newly constructed 0.50 million gallons per day (MGD) membrane bioreactor (MBR) WRF. Exhibit 2 Preliminary Collection & Treatment System (Appendix G) illustrates the proposed project phasing and infrastructure.

All generated domestic wastewater flows will be conveyed to the new TRSD WRF, which will be designed to have treatment capacity of 0.50 MGD at full buildout. The WRF will be owned, operated and maintained by TRSD, and TRSD will be responsible for the effluent management. It is anticipated that the WRF will be a modular design using the MBR process with multiple phases to accommodate additional flows as the collection system phases are completed. The contemporary membrane filtration technology will provide extremely high quality treated wastewater (known as effluent).

1.2 Project History

Many of the existing septic systems and cesspools within TRSD are in poor and failing condition. Cesspools were prohibited in the 1970's because they were described as a health and safety risk to humans and the environment as stated in the Arizona Administrative Code (AAC) R18-9-A309.A.4. Based on recent discussions with Gila County, an analysis of residential properties within TRSD indicates 89% of the existing facilities are in violation of the Clean Water Act (CWA) and AAC. In addition, a study was conducted in 2012 by Gila County to assess sewage treatment within TRSD named "Sewage Treatment Study, Tri-City Regional Sanitary District" dated November 2012 (Appendix I). This study discusses the extensive use of cesspools or substandard septic systems for sewage disposal within TRSD.

Gila County has documented the development of residential homes including real property, Improvements on Possessory Rights (IPR), and motor homes since 1905. Most homes constructed from 1905 to 1970 used cesspools as

primary means of sewage disposal. In the 1970's, construction of cesspools was prohibited in the United States due to their inability to treat wastewater before discharge. Further regulations were established in 1990 to improve septic system processes and testing. Thus, two major assumptions are used in this report to determine the current conditions of the TRSD existing facilities. All residential homes built between 1905 and 1970 are assumed to use cesspools. All residential homes built between 1970 and 1990 are assumed to have substandard septic systems. Therefore, all existing homes constructed between 1905 and 1990 are assumed to violate current standards for sewage disposal. The status of residential treatment systems throughout TRSD is shown in the table below.

Table 1 – Status of Residential Treatment Systems Throughout TRSD

Total Estimated Residential Properties	1,827	
Residential Properties with Cesspools	1,188	65%
Residential Properties with Substandard Septic Systems	434	24%
Total Systems in Violation	1,622	89%
Total Adequate Systems	205	11%

ADEQ has delegated enforcement of the use of cesspools and independent septic systems to Gila County within its boundaries. Gila County has refrained from actively seeking out properties in violation as a large portion of the community would suffer the repercussions of these violations leading to increased number of abandoned homes and associated hardship. Discussions with Wastewater Division Manager of Gila County, has put estimates of abandoned homes at about 300-400 within TRSD. Once an onsite wastewater system is determined to be 1) an outlawed cesspool, 2) a failing/substandard system, or 3) a failed system, the homeowner is left with few options. If it were a failing/substandard system, the owner would need pay to have it repaired and updated to modern standards. If it is a cesspool or failed system, the system must be abandoned. Once abandoned, a new system would need to be installed on a new piece of land. If this option is not feasible due to lack of available budget or land, the only option is to abandon the property because water service will be discontinued.

The responsibility for maintaining or replacing the septic systems currently remains with the homeowners and the need for replace would be determined by the homeowner as well. If the existing system can be replaced, the cost to homeowners for replacement of a failing onsite system could range from about \$5,000 to \$12,000 depending on the type, size and complexity of the system (Gila County, Arizona, 2014; Gila County, Arizona - Wastewater Department, 2014; SepticTankGuide.com, 2018). In an instance where a new piece of land is required, installing a new system can range from \$8,000 to \$25,000 (Hurd, 2016).

Other costs incurred by the homeowner suggested by guidelines on septic system maintenance are to have a septic system professionally inspected and pumped every one to five years (depending on system and use) with cost estimates ranging anywhere from \$425 to \$500 (SepticTankGuide.com, 2018; Gila County, Arizona - Wastewater Department, 2014; Hurd, 2016). Unfortunately, with the Median Household Income (MHI) of only approximately \$26,000, many residents would not be able to handle the financial burden of the installation of such a system.

Furthermore, a majority of the homes within the TRSD do not have enough usable land on which to install a replacement septic system. It is estimated that the average lot size in the TRSD is 5,000 ft² while the mining subdivisions have lot sizes of 3,750 ft², which equates to an average density of 8.72 to 11.63 homes per acre. Current regulations require any subdivisions with a density of greater than one (1) home per acre to reduce the nitrogen contribution to the ground in addition to removing the biological contaminants and viruses through advanced treatment systems or a wastewater collection and treatment system. Some small lots qualify to use the enhanced sewage treatment qualities of an alternative system to overcome the lot limitations. However, the system cost is normally more than the appraised value of the property. Some multiple lot properties have been able to replace failed cesspools with septic systems. Usually there are multiple cesspools replaced by one septic system.

Bechtel Tract, located within the Russell Road Area (southern portion of TRSD), is a 10-acre tract of land consisting of single-family homes. Bechtel Tract was constructed under financing from the Reconstruction Finance Corporation (RFC) with a small collection system and a centralized disposal system. The system is currently under the management of BHP Billiton (BHP), a local mining company, and is provided at no cost to the residents of Bechtel Tract. For years this collection system, septic tank, and leach field represented an above average sewer treatment process for the region. The system has since exhausted its useful life span. Efforts by BHP have been made to maintain the system serviceability over the years; these efforts include regular observation and maintenance as well as the installation of additional leach field lines in 1984. Upkeep costs will only continue to increase as the system continues to age. Due to

the deteriorating collection lines and substandard disposal, this system poses significant health and environmental concerns.

The majority of the TRSD area from a public health standpoint, without the installation of a wastewater collection and treatment system, will see the unsanitary conditions progressively worsen. As more and more cesspools and septic systems fail, homeowners of these small properties will allow wastewater to flow onto the ground until reported. As system failures become more frequent, the potential for waterborne illness increases. Children, the elderly, pets and wildlife are at higher risk as they are more vulnerable to contaminated areas that are exposed due to failing systems.

Without the installation of a regional wastewater collection and treatment system, economic hardship will continue. The smaller parcels will progressively be abandoned because these failing systems are not repairable/replaceable resulting in increased vacancy, declining property values, and property owners not being able to sell their properties.

1.3 Natural Environment

TRSD encompasses an area of approximately 5.45 square miles located in Gila County between the Town of Miami and City of Globe. TRSD lies within the Upper Pinal Creek watershed, Russell Gulch watershed, Bloody Tanks Wash watershed, and Miami Wash watershed at approximately 3,400 feet above mean sea level. The major stream drainages in the area are the Bloody Tanks wash (southwestern to northeastern flow) and the Miami wash watershed (flows north of the Bloody Tanks Wash and is east of Miami).

The Miami, Globe and TRSD areas were originally established due to the rich bodies of copper ore discovered within the surrounding Webster, Granite, and Pinal Mountains in the late 1800s. Globe was founded in 1876 and incorporated in 1907, while Miami was established in 1907 and incorporated in 1918. The main economy of the Globe-Miami area remains heavily involved in the mining industry with over 20 percent of its employment related to mining and copper production (Arizona Department of Commerce, 2014).

The most recent environmental reporting completed for the area was Environmental Assessment (EA) prepared by Logan Simpson in 2018. This report was prepared to accompany the Preliminary Engineering Report (PER) as required by the United States Department of Agriculture – Rural Development (USDA-RD) in order to apply for funding assistance. The size of the project caused the USDA-RD to encourage phasing the project. The project will be completed in three phases. Consequently, the PER (authored by Pacific Advanced Civil Engineering, Inc. dba PACE) and EA are focused on only Phase I of III. Both a PER and EA will be prepared for Phase II and Phase III individually. More details regarding the phasing is presented later in this report in Section 4.1 Construction Summary.

After review of other, more dated similar environmental planning, it is presumed that the other phases will be analogous to the Phase I area. The following discussions are from the Logan Simpson Environmental Assessment (2018) regarding Phase I.

1.3.1 Geology

The Logan Simpson EA (2018) describes the area geological elements:

Uses and activities that dominate the visual setting of the area include open pit mining, commercial and industrial land uses, urban infrastructure (streets, overhead transmission lines, lighting, and signage) and residential development. The pattern of the existing infrastructure and residential and commercial development is strongly influenced by the numerous ephemeral drainages running generally in a north-south direction in between small, rounded ridges covered by [sparse], open vegetation. These ephemeral drainages expose light colored soils. Vegetation within the area is sparse and generally consists of low stature shrubs with isolated and dispersed trees. (p. 32-33)

1.3.2 Groundwater Hydrology and Quality

Logan Simpson (2018) discusses the TRSD Phase I groundwater hydrology and quality:

In the Salt River Lakes sub-basin of the Salt River groundwater basin that occupies the portion of Gila County in the general vicinity of the project area, unconsolidated sands and gravels within the floodplains of streams and washes form an alluvial aquifer (Arizona Department of Water Resources...2010). In the Globe-Miami area, most of the area's municipal and industrial water supply comes from the Gila conglomerate that forms a local

aquifer (ADWR 2010). Groundwater in the area is located at a depth of 15 to 30 feet (ADWR 2010). Water is also supplied to the Globe-Miami area by a limestone aquifer and small basin-fill deposits forming isolated groundwater aquifers. Mining activities in the vicinity of the project area have impacted water quality in the alluvial aquifer along Miami Wash and Pinal Creek, consisting of elevated concentrations of metals and sulfate (ADWR 2010). (p. 43)

Groundwater contamination has been identified within the proposed project area associated with the Pinal Creek Water Quality Assurance Revolving Fund (WQARF) site. This WQARF site follows the floodplains of Bloody Tanks Wash and Russell Gulch, to their confluence with Pinal Creek. The ADEQ WQARF program investigates and cleans up contaminated soil sites and groundwater across the state. The primary pollutant concerns are waste rock from nearby mining activities and heavy metals from acid-metal runoff from tailings. Contamination is also found in the alluvial aquifer of Bloody Tanks Wash-Miami Wash-Pinal Creek, in the regional Gila conglomerate aquifer. Groundwater from the alluvial aquifer is generally not used because it is contaminated. Water provided by the [Arizona] Water Company or the City of Globe to the residents of Miami, Globe, and Claypool comes from the Gila conglomerate aquifer outside of the boundaries of the WQARF site and is tested to ensure it meets all state and federal drinking water standards. Cleanup of the Pinal Creek WQARF site resulting from decades of mining contamination is ongoing. (p. 43)

The existing residential treatment systems, consisting of cesspools and septic systems, currently used for wastewater disposal within the TRSD [boundary] have generated concerns about the quality of groundwater in the area. Many of the septic systems in use have been improperly maintained and/or were poorly located and improperly designed and installed, resulting in discharge of untreated wastewater and pollutants (e.g., nitrogen) into the environment, ultimately affecting groundwater.... (p. 43-44)

The majority of wastewater disposal within the TRSD [boundary] is facilitated through individual treatment systems for residences and some businesses. Although these systems can adequately treat wastewater, the lack of proper maintenance can result in the release of improperly treated or untreated wastewater into the environment. (p. 44)

Both Globe and Miami have municipal wastewater collection and treatment systems for the areas under their jurisdiction. FMI recently completed construction of a new WRF for the Town of Miami that nearly doubles the treatment capacity from the previous wastewater system. Treated wastewater from the Miami WRF meets all EPA and ADEQ standards, and treated effluent is used by FMI for mining operations and golf course irrigation, as well as to replenish the aquifers. The Pinal Creek Wastewater Treatment Facility [Globe treatment facility] receives domestic wastewater from residential and commercial sources in Globe. Treated wastewater from this facility is discharged into Pinal Creek and the Salt River Basin and meets all EPA and ADEQ standards. (p. 44)

1.3.3 *Surface Water Hydrology*

Logan Simpson (2018) discusses the TRSD Phase I surface water hydrology:

The Phase I area is within the Upper Salt River watershed. The two principal drainages in the Phase I area are Bloody Tanks Wash and Russell Gulch, which are ephemeral⁹ drainages that flow northwest to Pinal Creek, a tributary of the Salt River (Figure 4). Several smaller ephemeral drainages occur within the Phase I area, draining into Bloody Tanks Wash. Ephemeral drainages receive flow from heavy precipitation and snowmelt and are not recharged by groundwater. The majority of precipitation occurs during the months of July and August. Some surface water may seep through to groundwater, but it is typically dissipated by runoff and evaporation. No perennial streams (continuously flowing) were identified in the Phase I area and no unique, impaired, or non-attaining waters are located in or near the project area.

Stormwater refers to water runoff from either pervious or impervious surfaces as the result of rain or snow. Stormwater can capture chemicals, sediment, and general debris and transport them to adjacent waterbodies. Stormwater pollution can originate from many sources including water runoff from parking lots, residential areas, industrial facilities, construction projects, streets, and various urban areas. In the project area, stormwater is conveyed by naturally occurring ephemeral drainages, some of which have been manipulated and paved with streets and curbs. (p. 43)

1.3.4 *Habitat*

1.3.4.1 *Vegetation*

Logan Simpson (2018) discusses the TRSD Phase I vegetation:

is typically characterized by the presence of perennial grasses in an otherwise scrub-dominated landscape. Stem and leaf succulents are also well represented. Vegetation in this area is transitional, with many plant species present that are more indicative of lower-elevation desert scrub communities and higher-elevation chaparral communities...

Vegetation within the area includes non-native landscaped plants in residential and commercial frontages, as well as non-native invasive species within the roadway rights-of-ways. Plant species observed throughout the project limits during a site reconnaissance visit include desert broom (*Baccharis sarothroides*), velvet mesquite (*Prosopis velutina*), oaks (*Quercus* spp.), junipers (*Juniperus* spp.), catclaw acacia (*Senegalia greggii*), desert spoon (*Dasyliirion wheeleri*), rabbitbrush (*Ericameria nauseosa*), foothills paloverde (*Parkinsonia microphylla*), blue paloverde (*Parkinsonia Florida*), tree-of-heaven (*Ailanthus altissima*), and Russian thistle (*Salsola tragus*). (p. 35)

1.3.4.2 *General Fish and Wildlife Resources*

Logan Simpson (2018) discusses the TRSD Phase I general fish and wildlife resources:

Fauna typically occurring in the biotic community associated with the project area include black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus auduboni*), brush mouse (*Peromyscus boylii*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), common raven (*Corvus corax*), scaled quail (*Callipepla squamata*), roadrunner (*Geococcyx californianus*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), black-chinned sparrow (*Spizella atrogularis*), and lark sparrow (*Chondestes grammacus*). (p. 35)

2 Project Description

2.1 Overview

2.1.1 *DMA / Service Area*

TRSD's DMA designation was previously approved with CAG 208 Plan Amendment #2017-02. With this 208 amendment, TRSD is requesting that the WRF site, located just north of the northern portion of the TRSD boundary, be added to the TRSD DMA. The TRSD boundary with legal descriptions are included in Appendix D. Also included is the legal description for the new WRF site that will be added to the TRSD boundary. The following Figure 3 and Exhibit 7 (Appendix G) shows the current and proposed expanded DMA.

2.1.2 *Facility Ownership*

The new WRF, lift station and wastewater collection systems will be owned, operated and maintained by TRSD. Land will need to be acquired for the installation of the new TRSD WRF and the construction of the regional lift stations and the neighborhood lift stations. The actual land requirements will be determined during the engineering design phase of the improvements. TRSD is in the process of acquiring a parcel from BHP, via donation, for the location of the proposed new WRF. Additional details are discussed in Section 3 Wastewater Treatment Facility. The new TRSD Lift Station in Phase I is located on a parcel owned by FMI which TRSD has obtained an easement for this infrastructure.

The project may require the acquisition of additional Right-of-Ways (ROWs) or easements along proposed collection piping alignments if there are no existing easements defined when they cross into private property. TRSD has identified potential collection line ROW issues where existing roads are not on public ROWs. TRSD and its consultants have formed a working relationship with Gila County through numerous communications with the Public Works Director and others. Through this relationship, TRSD has gained support of Gila County in assistance with efforts to resolve these issues.

2.1.3 *Type of Facility*

Currently, there are no existing TRSD facilities. The project, at full buildout, will consist of the installation of the following new wastewater collection and treatment system infrastructure:

- 159,276+/- linear feet (LF) of gravity mains
- 27,500+/- LF of force main
- 415+/- new manholes
- 2,159+/- new service connections
- 0.50 MGD membrane bioreactor (MBR) water reclamation facility

The proposed new 0.50 MGD MBR WRF facility will consist of a headworks system, secondary activated sludge process with membrane filtration and disinfection (either chlorination or ultraviolet). The treatment facility will not include a septage receiving station. The treated wastewater (or effluent) from this type of WRF will meet Class A+ Reclaimed Water Standards which is the highest effluent quality classification for the State of Arizona detailed in Arizona Administrative Code Title 18 Environmental Quality (ACC Title 18 EQ). This effluent will be discharged into Miami Wash, a contributor to Pinal Creek. Exhibit 2 identifies the proposed WRF location, and Exhibit 3 is a closer look with both a conceptual layout of the WRF and an area for potential location of the discharge point within Miami Wash (Appendix G). Since the effluent will meet ACC Title 18 EQ standards, it will allow the potential for effluent to be reused for unrestricted irrigation of public landscape and common areas. The anticipated permitting required will be an ADEQ Aquifer Protection Permit (APP) and Arizona Pollutant Discharge Elimination System (AZPDES) permit.

Biosolids will be produced by the proposed WRF. At full buildout, the facility will produce approximately 1,200 lbs per day. Biosolids land application is a future possibility; however, this option is not being considered at this time. The biosolids will be dewatered for disposal in a landfill. All processes of treatment, handling and selection of disposal facility will be properly permitted under the ADEQ AZPDES program and carried out according to the associated regulations. These regulations include:

- Arizona Revised Statutes (ARS) Chapter 49 The Environment, Article 3.1 Arizona Pollutant Discharge Elimination System Program
- ACC Title 18 Environmental Quality
 - Chapter 09, Article 10: Arizona Pollutant Discharge Elimination System – Disposal, Use, and Transportation of Biosolids

- Clean Water Act as amended (33 U.S.C. §1251 et seq.)
- Code of Federal Regulations (CFR)
 - 40 CFR258: Criteria for Municipal Solid Waste Landfills

The treatment facility will include an Operations and Maintenance (O&M) building. The building will include areas for operations and maintenance duties, including storage and a maintenance/repair shop. It is estimated that this building will be between 2,500 and 3,000 square feet (SF) in floor space.

2.1.4 Buildout Capacity

The proposed new WRF be a 0.5 MGD at full buildout and will be built in three phases.

Table 2 – TRSD Capacity Phasing

Phase	Treatment Capacity
Phase I	0.25 MGD
Phase II	0.15 MGD
Phase III	0.10 MGD
Totals at Full Buildout	0.50 MGD

2.1.5 Stakeholders and Neighboring Communities

The major stakeholders are the residents, business, industries and other users within the TRSD boundary, especially those who will potentially be served by the project. As a sanitary district, TRSD has the authority, with formal support of its users, to incur debt and levy a tax for the purpose of providing a community service to those within its boundaries.

Other stakeholders and neighboring communities are listed below. It is intended that these agencies and service providers will be informed of any planned public meetings and will be encouraged to attend to be fully informed of the available project information.

- Gila County
- Town of Miami
- City of Globe
- San Carlos Apache Tribe
- Freeport McMoRan Inc. (FMI)
- BHP Billiton (BHP)
- Cobre Valley Regional Medical Center
- Arizona Eastern Railway
- Rural Communities Assistance Corporation (RCAC)
- Rural Water Association of Arizona (RWAA)
- Arizona Water Company
- Local realtors
- Arizona Public Service (APS)
- Southwest Gas
- Cable One (Sparklight)
- CenturyLink

Letters of support have been received from Globe and Miami (Appendix C). TRSD has reached out to the San Carlos Apache Tribe, but have not heard back at this time.

2.1.6 DMA

TRSD was formed by the merger of two existing sanitary districts, CVSD and PSD. Due to the merger of CVSD and PSD, TRSD now administers both of the recognized designated management agencies (DMAs). As the administrator of these documented existing DMAs, TRSD is only entity that has the authority to make any modifications. Appendix D includes all formation and merger documentation, and the recorded legal description and boundary map. Upon the approval of this amendment, TRSD is seeking EPA approval of the TRSD named designation as DMA of its boundary.

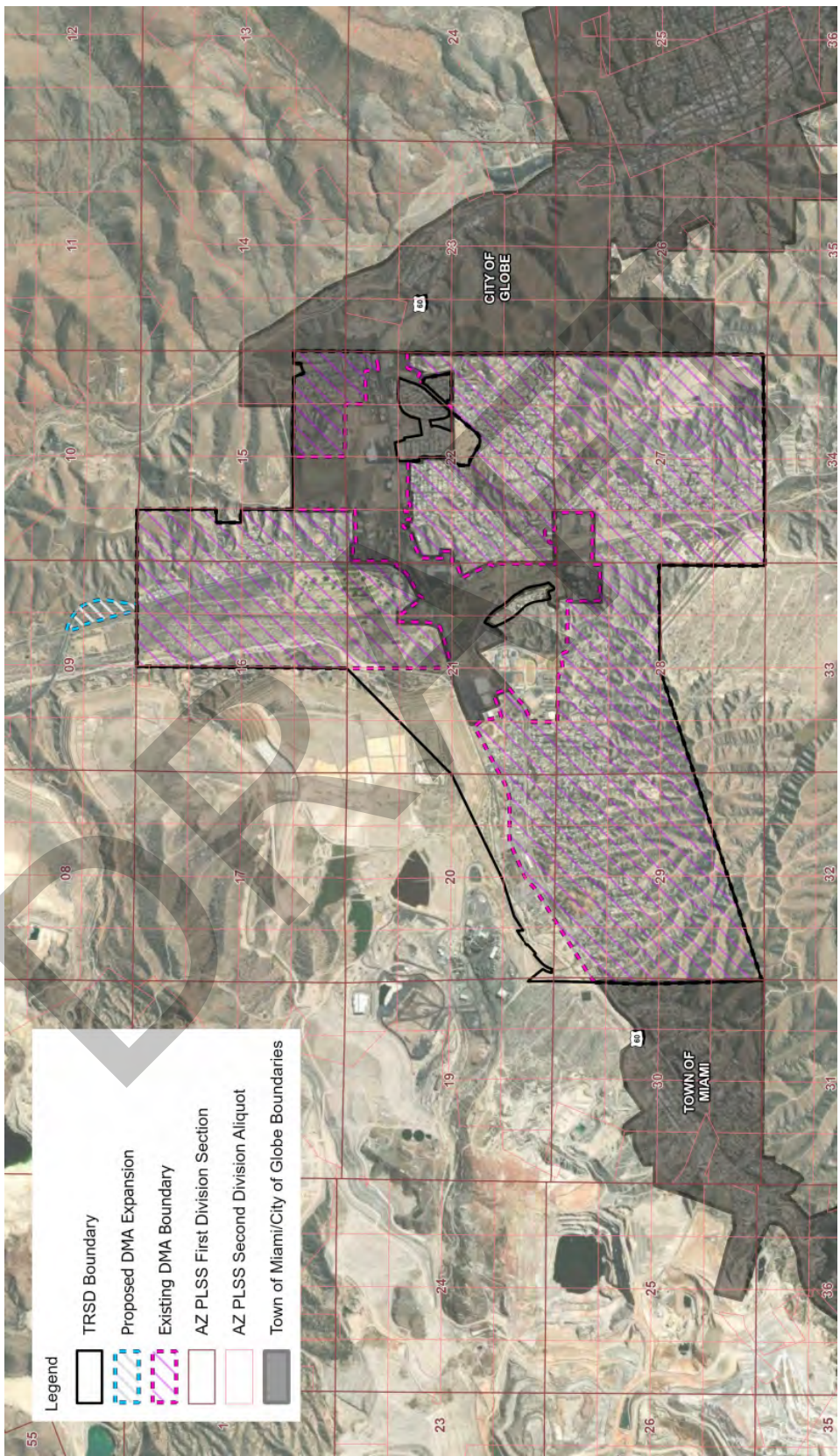
TRSD has worked with neighboring City of Globe (Globe) and Town of Miami (Miami) to negotiate specific areas of the DMA boundaries. TRSD Board has agreed to modify significant portions of its DMA to Globe that lie within its city boundaries and other portions to Miami because they are areas Miami is already servicing. Additional coordination is anticipated to take place to negotiate possible intergovernmental agreements (IGAs) to address any servicing overlap between all agencies.

TRSD's DMA designation was previously approved with CAG 208 Plan Amendment #2017-02. With this 208 amendment, TRSD is requesting that the WRF site, located just north of the northern portion of the TRSD boundary, be added to the TRSD DMA. TRSD is in the process of acquiring a parcel from BHP, via donation, for the location of the



proposed new WRF. Additional details are discussed in Section 3 Wastewater Treatment Facility. The new TRSD Lift Station in Phase I is located on a parcel owned by FMI which TRSD has obtained an easement for this infrastructure. See the following Figure 3 and Exhibit 7 (Appendix G).

Figure 3 – TRSD DMA



2.1.7 All Facility Locations

Currently, there are no existing TRSD facilities. All proposed new TRSD facility locations are illustrated on Exhibit 2 Preliminary Collection & Treatment System (Appendix G). At this time, there are no specific addresses to supply. As described in Section 2.1.2 Facility Ownership land acquisitions are in negotiation stages and will be determined during the engineering design phase of the improvements. TRSD is in the process of acquiring a parcel from BHP, via donation, for the location of the proposed new WRF. Additional details are discussed in Section 3 Wastewater Treatment Facility. The new TRSD Lift Station in Phase I is located on a parcel owned by FMI which TRSD has obtained an easement for this infrastructure.

2.1.8 Legal Descriptions

The complete existing DMA boundary is within Township 1 North, Range 15 East of the Gila and Salt River Meridian. The full, recorded legal description is included in Appendix D.

2.2 Current & Future Conditions

2.2.1 Population

Precise population records for the TRSD are not available because the boundary encompasses a collection of unincorporated community areas that are not recognized by the United States Census Bureau (USCB). To develop reasonable estimates of the affected population, trends and growth within the TRSD, several methods were performed including examining USBC Census Block Groups (CBGs), USBC Census Designated Places (CDPs), and utilization of the Environmental Justice Screening and Mapping Tool (EJSCREEN) provided by the Environmental Protection Agency (EPA).

2.2.2 Census Block Groups Review for Existing Population

One information source reviewed to develop a population estimate was the 2010 Census Block Map Series, also referred to as the Geographic Unit (GU) block maps. This source is produced to support the 2010 Decennial Census data release. These maps display tabulation geography down to the census block level" (United States Census Bureau, 2013).

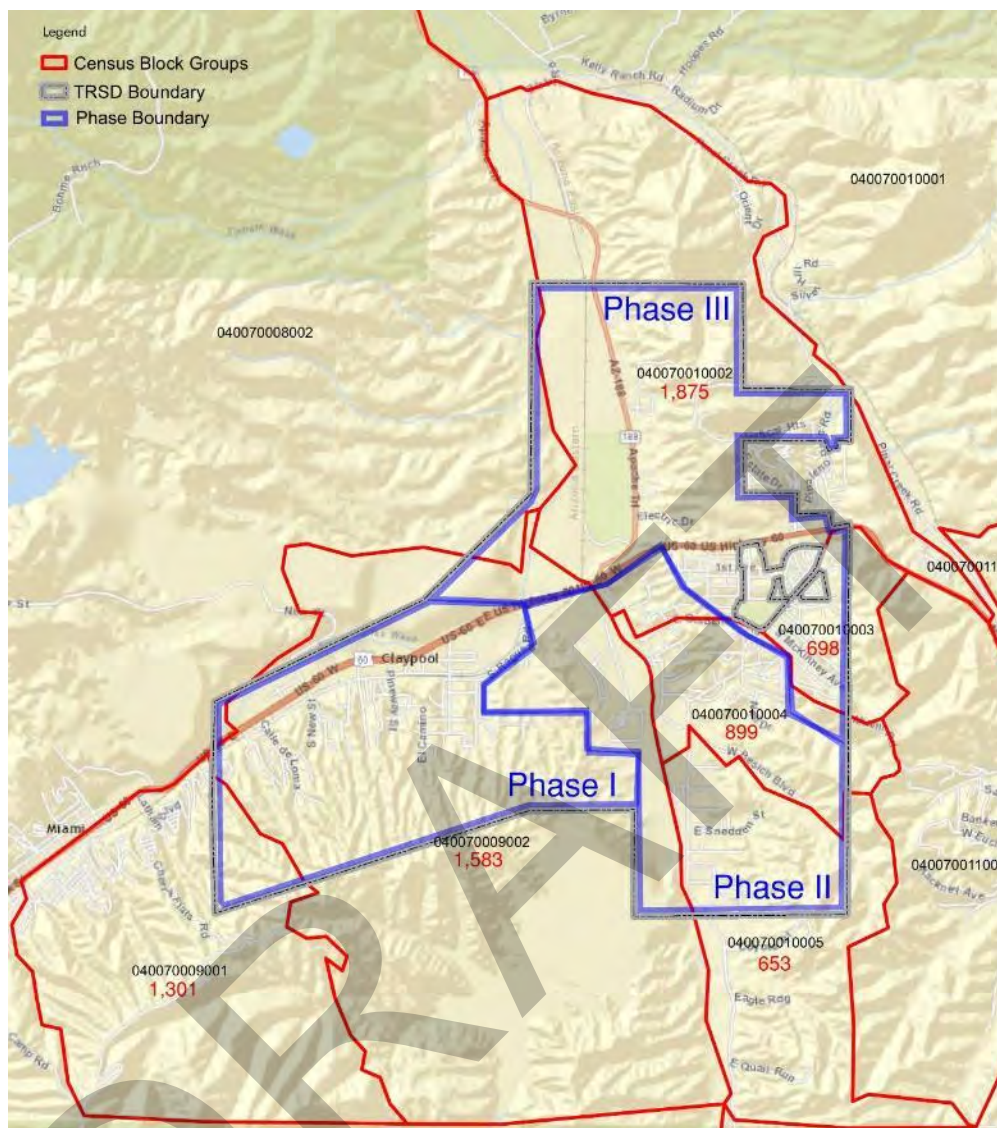
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Figure 4 – Census Block Groups Map illustrates the CBGs that contribute to the TRSD area. With the TRSD boundary including just portions of numerous CBGs, this data would only provide very rough estimates of the population figures.

Figure 4 on next page.

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Figure 4 – Census Block Groups Map



2.2.2.1 Review of Surrounding Communities for Existing Population and Trends

Another consideration for developing population estimates and trends was to look at the growth patterns of CDPs in the Globe-Miami area, see Table 3 below for population trends for surrounding communities.

Table 3 – Surrounding Community Population Trends

Community	1990	2000	2010	1990-2010
City of Globe	6,062	7,486	7,157	18%
Town of Miami	2,018	1,936	1,765	-13%
Claypool (CDP)	1,942	1,794	1,538	-21%
Central Heights-Midland (CDP)	2,969	2,694	2,534	-15%
Globe-Miami Region (CDPs)	12,991	13,910	12,994	0%

Note: City of Globe decreased 4% in population from 2000-2010

Miami, Claypool, and Central Heights-Midland have all experienced a consistent decline in population for the past 20 years. Globe did sharply increase in population between the 1990 and 2000 census, but has since declined in the most recent census. This indicates a regional trend of population decline. Some of the population decrease in these TRSD area communities may very likely be attributed to the diminishing conditions, amount of abandoned properties, and/or

properties that have had water supply disconnected due to violations of onsite wastewater management. Additionally, mining activity can affect population growth/loss within a region.

2.2.2.2 TRSD Estimated Affected Population and Growth Projections

Due to the lack of specific recorded population information, during the development of the PER, the USDA recommended using the Environmental Justice Screening and Mapping Tool (EJSCREEN) provided by the Environmental Protection Agency (EPA). This tool allows the user to draw a freestyle boundary to select a specific area. This action was completed independently for TRSD Phase I, Phase II and Phase III. Appendix H includes the reports of each boundary with detailed population estimates. The EJSCREEN data includes the 2010 Census to determine estimated existing population and US Census Bureau American Community Survey (ACS) information to estimate growth from 2011 to 2015.

Table 4 summarizes the figures obtained from EJSCREEN. Using the 2010 Census data, the overall TRSD population is approximately 4,200 (Line 1). The ACS 2011-2015 population estimates (Line 4) were then used to calculate the Growth Estimate (Line 7), Growth Estimate percentage (Line 8) and the Growth Estimate percentage annually (Line 9). When considering the result of an estimated 3% annual growth for the overall TRSD, it seems high compared to the documented trends of population decline shown for the surrounding communities.

Table 4 – EJSCREEN Population Data

Line	Data Description	TRSD Phase I	TRSD Phase II	TRSD Phase III	TRSD Total
1	Census 2010 Population	1,586	1,490	1,042	4,118
2	Census 2010 Housing Units	777	689	519	1,985
3	Census 2010 Persons/Housing Units	2.04	2.16	2.01	2.07
4	ACS 2011-2015 Population Estimate	1,922	1,780	1,032	4,734
5	ACS 2011-2015 Housing Units Estimate	863	824	571	2,258
6	ACS 2011-2015 Persons/Housing Units Estimate	2.23	2.16	1.81	2.10
7	Population Growth Estimate (Line 4 – Line 1)	336	290	-10	616
8	Population Growth Estimate % (Line 7 / Line 1)	21%	19%	-1%	15%
9	Population Growth Estimate % per Year (Line 8 / 5)	4.2%	3.9%	-0.2%	3.0%

Utilizing the EJSCREEN estimated population annual growth of 3%, the future population projections were calculated and are summarized in Table 5.

Table 5 – TRSD Future Population Projections

Population Year	Source / Estimate	Population
2010	US Census	4,118
2018	Present Estimate	5,217
2023	5-Year Estimate	6,047
2028	10-Year Estimate	7,011
2038	20-Year Estimate	9,422

2.2.3 Land Use and Wastewater Flows

Without documented historical information for the TRSD boundary such as the population estimates/growth projections or a wastewater master plan for land use information, an alternative method needed to be used. The only recorded information available is the parcel information managed by the Gila County Assessor’s Office. Through an evaluation of potential equivalent dwelling units (EDU), a methodology was developed to present land use data, estimate flow projections, and offer reasonable growth projections.

2.2.3.1 Methodology

The most updated parcel data was obtained from the Gila County Assessor’s office in mid-2018 (due to lag in the assessor’s updates, the information is as of December 2017). The parcel information included Assessor’s Parcel Numbers (APN), land use, lot size, parcel maps, owner information, and number of structures. Parcel data and aerial photography were used to understand the current conditions of the TRSD and locate occupied parcels. Parcels were evaluated to determine the feasibility of connection to the TRSD wastewater collection system. A preliminary design of

the collection system was then developed using this information (Exhibit 2 in Appendix G). To evaluate in more depth, the areas that will be receiving new service, aerial imagery was used in conjunction with geographic information system (GIS) software to review each parcel. After review of all parcels and properties within the TRSD area, some parcels were not included in the estimations for various reasons such as land considered undevelopable due to site constraints, etc.

2.2.3.2 Equivalent Dwelling Unit (EDU) Assessment

Each parcel was reviewed in conjunction with the preliminary layout of the new collection system and given a category description to help determine EDUs and the number of new service connections, (the EDU count does not always equal the number of new connections). The following guidelines were used in the calculations.

- Each occupied residential parcel accounted for one (1) EDU.
- Residential parcels with multiple units or structures were quantified with additional EDUs as required.
- Parcels classified as “mobile homes” are assumed (by the Gila County Assessor’s office) to have one (1) connection per parcel where the main line meets the property, however, for the purpose of estimating the EDU count and projecting wastewater flows, each individual mobile home was assessed 1 EDU.
- Improvements on Possessory Rights (IPR) parcels were considered to have separate connections for each leased lot within a parcel containing IPR.
- Commercial, industrial, and vacant property EDUs were estimated on gross acreage of the parcel.

Once the parcel guidelines were determined, the parcels were categorized for the purpose of 1) estimating potential wastewater flows and 2) calculating “frontage” for use in the assessment district process. The following Table 6 summarizes the categories, subcategory/descriptions and EDU calculation factors used.

Table 6 – EDU Assessment

Category	Subcategory / Descriptions	EDU Calculation Factor
Occupied	“Parcels With Frontage” (parcels that have at least one EDU and are adjacent to or within 300 ft of the proposed pipeline)	Residential 1 EDU
	“Parcels Without Frontage” (parcels that have at least one EDU and are adjacent to or within 300 ft of the proposed pipeline)	Commercial 7.5 EDU/acre
	“ROW Parcel” (Parcels that will be requested to grant ROW for other parcels without frontage to receive service)	Industrial 3.75 EDU/acre
	“Dependent on ROW Parcel” (parcels that require other parcels to grant ROW to receive service)	
Vacant	Uninhibited parcels within the area that are adjacent to or within 300 ft of the proposed collection line. May be a ROW parcel or Dependent on ROW Parcel.	Residential <0.33 acre = 1 EDU >0.33 acre = 3.75 EDU/acre

2.2.3.3 Land Use

Using the methodology described above, EDU estimates for all included parcels were summarized by land use type in the following Table 7.

Table 7 – TRSD Total Estimated EDU Count by Land Use Type

Land Use Type	Phase I EDU	Phase II EDU	Phase III EDU	Total EDU
Residential	648	434	546	1,628
Residential Mobile	84	212	46	342
Residential IPR	74	0	0	74
Commercial	174	147	138	460
Industrial	30	62	1	93
Vacant Mobile	1	3	0	4
Vacant IPR	0	0	0	0
Vacant	339	388	343	1,070
Other	24	5	9	38
Totals	1,374	1,251	1,084	3,709

2.2.3.4 Wastewater Flow Calculations

2.2.3.4.1 Design Flow

ADEQ requires a value of 80 gallons per capita per day per individual residing in a dwelling for a wastewater collection system under AAC R18-9-E301(D) and AAC R18-9-B301(K), excluding peaking factors. Using this value with the estimate of Census 2010 Persons/Housing Units of approximately 2.07 (Table 4, Line 3 of (Total TRSD) provides a calculation of about 165 gallons per day (GPD)/EDU. To account for any possible variance due to the nature of the methodology applied, a buffer is being applied. While the parcel research method accounts for Gila County data as well as aerial surveys, there is the possibility of variances when only working with conceptual planning information for the 3,000+ parcels. To estimate the projected wastewater flows for this new collection system, a design 175 GPD/EDU will be used.

2.2.3.4.2 Future Wastewater Flow Projections (Reasonable Growth)

Table 8 shows a summary of projected EDUs, flow projections and the estimated population that will be served for each phase of the TRSD wastewater collection and treatment system.

Table 8 – TRSD Total EDUs and Wastewater Flow Projections by Phase

Phase	EDU	Flow Capacity (GPD)	Estimated Population
Phase I	1,374	240,402	2,457
Phase II	1,251	218,925	2,535
Phase III	1,084	192,442	1,741
Totals at Full Buildout	3,709	651,768	6,733

The parcel research methodology used to estimate EDU and flow projections considers the status of the community. So when considering future flow projections and planning capacity, a significant factor is the vacant properties. Although there are various reasons that these are vacant and as discussed in Project History on page 1-3, many properties may be left vacant because of the lack of sewer service leading to deterioration of the community value by a large amount of abandoned homes. Table 7 – TRSD Total Estimated EDU Count by Land Use Type shows that 1,070 of the total estimated EDUs are vacant properties. Instead of using projected population for the preliminary/conceptual planning, these vacant properties are being considered reasonable growth. With the installation of a collection and treatment system, thereby having a positive impact on the community, will bring value to the area and potentially create an atmosphere supportive of property development.

Table 9 below shows the percentage of vacant properties which allows for approximately 25% capacity as reasonable growth.

Table 9 – TRSD Reasonable Growth Estimates

Flow Type	Flow Capacity (GPD)	EDU
Residential	141,050	806
Commercial / Industrial / Other	99,400	568
Total	240,450¹	1,374
Parcel Type	Flow Capacity (GPD)	EDU
Vacant With Frontage	36,750	210
Vacant Without Frontage	22,750	130
Total	59,500¹	340
Reasonable Growth		
Vacant Parcels Total Flow Estimate (GPD)		59,500
Total Flow Estimate (GPD)		240,450
Estimated Growth		25%

¹Estimated based on 175 GPD per EDU

2.2.4 Current & Future Conditions Summary

As discussed, the estimated population annual growth of 3% (estimated using the EJSscreen) is a high estimate based on the review of the documented population of the surrounding areas. Without precise population records for the TRSD, wastewater flows were estimated by the evaluation and calculation of EDUs. For the preliminary/conceptual planning, reasonable growth was then projected by the amount of existing vacant properties within the TRSD DMA that will have a centralized wastewater collection and treatment system available and are more likely to be built upon, sold, etc. to bring flows and population to the area.

3 Wastewater Treatment Facility

3.1 Wastewater Treatment Facility

3.1.1 Location

The New location of the TRSD WRF will require land acquisition of approximately 7.7 acres for the new infrastructure itself. This will not be enough land to satisfy the ADEQ setback requirements, therefore several waivers may be required from nearby landowners. TRSD is in the process of acquiring a parcel from BHP, via donation, for the proposed new WRF. The property is Gila County Assessor's parcel number #205-03-010. The parcel is located off of Highway 188 (just north of and adjacent to the northern portion of TRSD) and is proposed to be incorporated into the Existing TRSD DMA. Exhibits 2 and 3 show the proposed location and a conceptual layout of the new TRSD WRF (Appendix G).

3.1.2 Type of Facility

The proposed new 0.50 MGD (at full buildout) facility will be a modular design using the membrane bioreactor (MBR) process and will consist of a headworks system, secondary activated sludge process with membrane filtration and disinfection (either chlorination or ultraviolet). The treatment facility will not include a septage receiving station.

The MBR treatment process is similar to traditional activated sludge processes where it uses natural occurring microorganisms for the biological oxidation of organic and nutrient load in the wastewater. However, instead of the traditional clarification process for liquid-solid separation, such as clarifiers, the MBR utilizes submerged in-tank microfiltration membranes to perform the liquid-solid separation. There are several main advantages of the microfiltration membranes. First, the membranes not only perform liquid-solid separation, they also filter the effluent, allowing the effluent to meet tertiary filtration requirements. Microfiltration is a more advanced filtration system than typical tertiary filters, such as sand or cloth. Microfiltration can remove particles down to less than 1 micron. This allows for the removal of inert and organic particulates, larger microorganisms (i.e., bacteria, crypto sporidium and giardia), turbidity and even some viruses. Typical tertiary filtration systems, on the other hand, can only remove down to 5 microns or larger. With the exception of final disinfection, effluent from an MBR meets the highest effluent quality standards for the State of Arizona detailed in ACC Title 18 EQ standards.

The new WRF will be designed with an open treatment process, process ventilation and some odor, noise and aesthetic controls. The design will include strategies to minimize the release of odors to avoid impact to any neighbors. With an ultimate build out of 0.50 MGD, the noise, odor and aesthetic setback requirement is 750 ft. This setback distance is required for facilities within a treatment capacity range of 0.5 MGD to less than 1.0 MGD.

An influent lift station will be required since the flows will be brought to the new WRF plant via gravity lines. The wastewater flow will first enter the facility at the headworks system that will consist of screening to remove trash and large inorganic materials. Grit removal and flow equalization may be required depending on treatment process selected; however, this can also be performed at the collection system lift stations.

Biosolids will be produced by the proposed WRF. At full buildout, the facility will produce approximately 1,200 lbs per day. Biosolids land application is a future possibility; however, this option is not being considered at this time. The biosolids will be dewatered for disposal in a landfill. All processes of treatment, handling and selection of disposal facility will be properly permitted under the ADEQ AZPDES program and carried out according to the associated regulations. These regulations include:

- Arizona Revised Statutes (ARS) Chapter 49 The Environment, Article 3.1 Arizona Pollutant Discharge Elimination System Program
- ACC Title 18 Environmental Quality
 - Chapter 09, Article 10: Arizona Pollutant Discharge Elimination System – Disposal, Use, and Transportation of Biosolids
- Clean Water Act as amended (33 U.S.C. §1251 et seq.)
- Code of Federal Regulations (CFR)
 - 40 CFR258: Criteria for Municipal Solid Waste Landfills

The treatment facility will include an operations and maintenance (O&M) building. The building will include areas for operations and maintenance duties, including storage and a maintenance/repair shop. It is estimated that this building will be between 2,500 and 3,000 square feet (SF) in floor space.

3.1.3 Flow Rates

The current proposed WRF design capacity phasing is 0.25 MGD for Phase I, an addition of 0.15 MGD for Phase II, and 0.10 MGD for Phase III. The ultimate buildout for the facility with all three phases will be 0.65 MGD. All design capacities are based on Maximum Month Average Daily Flow.

3.1.4 Sewage Acceptance

This facility will be designed to accept 100% domestic wastewater flows for treatment. Industrial / commercial wastewater will not be accepted without pretreatment. Any future industrial / commercial wastewater acceptance will require TRSD Board action. At that time, the policies and procedures will be developed to ensure any discharge accepted will meet the ADEQ / EPA Pretreatment Standards.

The treatment facility will not include a septage receiving station. Currently within the area, two options for septage receiving are at the Town of Miami and the Superstition Mountain Community Facilities District in Apache Junction.

3.2 Sewage Collection System

Based on evaluations performed by Gila County, it is estimated that nearly 90% of the properties within TRSD are currently served by either substandard/failing septic systems or cesspools. A centralized collection system will be designed and constructed to facilitate the abandonment of the existing cesspools and septic systems.

The project, at full buildout, will consist of the installation of the following new wastewater collection system infrastructure:

- 159,276+/- linear feet (LF) of gravity mains
- 27,500+/- LF of force main
- 415+/- new manholes
- 2,159+/- new service connections

If terrain warrants, individual lift stations and pumps may be used for specific parcels within the area. It is the intent of TRSD that the collection system will be installed within existing road ROWs. In those areas where it is not feasible to install the collection mains in a ROW, it will be necessary to secure an easement from the property owner.

3.3 Effluent Management

3.3.1 Discharge

3.3.1.1 Effluent Quality

Beyond meeting the regulatory requirements, TRSD prefers that the new WRF produce the best effluent feasible to demonstrate environmental stewardship in the region. At a minimum, ADEQ requires new facilities to produce effluent that will meet ACC Title 18 EQ classification called Best Available Demonstrated Control Technology (BADCT). The BADCT effluent requirements are as follows:

1. BOD5: <30 mg/l
2. TSS: <30 mg/l
3. PH: 6.0 – 9.0
4. TN: <10 mg/l
5. E. Coli: Non-detect in 4 out of 7 daily samples,
single sample maximum not to exceed 23 cfu/100mL

The TRSD facility effluent will also meet ACC Title 18 EQ Class A+ Reclaimed Water Standard classification, which is similar to BADCT with the additional requirements of tertiary filtration and turbidity limits of less than 2 NTU (nephelometric turbidity units). The Class A+ classification will allow the potential for the effluent to be reused for unrestricted irrigation of public landscape and common areas.

Typically, the BADCT plus filtration will meet AZPDES permit requirements, however, ADEQ may impose additional effluent quality limits on a facility that discharges into washes or ephemeral streams. Any required additional limits will not be known until the ADEQ permitting pre-application meeting during the early design phase.

3.3.1.2 Effluent Management

Due to the ongoing flushing process of Pinal Creek, FMI (a mining company and a TRSD project stakeholder), has expressed interest in the flows produced by the new TRSD WRF to be discharged into Miami Wash which is a contributor

to Pinal Creek. This would contribute to the overall environmental cleaning within the region. The proposed discharge location is shown on Exhibit 3 (Appendix G).

This WRF will have a constant discharge. Discharge volume from the WRF will be dependent on the number of connections. As homes are phased in, the flow will increase. The buildout flow will be 0.05 MGD, equating to an annual discharge volume of approximately 237 million gallons.

3.3.2 Reclamation/Reuse

Since the effluent will also meet ACC Title 18 EQ Class A+ Reclaimed Water Standards, it will allow the potential for the effluent to be reused for unrestricted irrigation of public landscape and common areas. Until a reuse option is implemented, the WRF will be discharging into Miami Wash. This discharge requires an ADEQ AZPDES permit. Based on the requirements; this may affect the disposal for excess effluent, requiring the use of other disposal options, such as percolation basins or injection wells.

Currently, there are several available options for potential effluent reuse for the new TRSD WRF; however, at this time TRSD is not pursuing these options. The options include:

- A number of the mining companies in the area have expressed interest in utilizing the facility's effluent within their operations. Any discussions of this usage would include the mining company providing pumps and piping to convey the effluent to the desired locations.
- The local golf course, Cobre Valley Country Club (CVCC) has expressed interest in obtaining the effluent for irrigation of the course. CVCC struggles to obtain enough water to keep the course green. Any discussions of this usage would include CVCC providing pumps and piping to convey the effluent to the golf course.
- Discussions have taken place regarding the utilization of the effluent to create a lake with a surrounding regional community park constructed for recreational use, providing an amenity for the area. The cost of the lake and park would not be bore wholly by TRSD, but would be a collaboration by a number of interested groups in the region including Gila County.

3.4 **Service Connections**

3.4.1 New Service Connection Infrastructure

New service connections will include a lateral from the main line to the existing connection at the residence or business, abandonment (in place) of the existing onsite wastewater treatment system (cesspool, septic tank, leach fields), and restoration of the yard. Exhibit 5 (Appendix G) illustrates a typical lateral connection. This work will include the following for each new connection:

- The abandonment in place of existing residential cesspools and septic systems
- Installation of laterals from existing homes to the new mains including 2-way building cleanout

3.4.2 Service Connection Permitting Process & Procedures

TRSD has been and will continue working closely with Gila County Wastewater Division (GCWD) to ensure all current residents and new customers are supported during the development/construction phases of this project and thereafter. All permitting will continue to be facilitated through Gila County. Procedures during and after the development of this wastewater collection and treatment project are summarized below.

3.4.2.1 *Existing TRSD customers that have no immediate need for any changes to their property and have onsite treatment systems that are in working condition*

These customers will be contacted by TRSD to coordinate connection as the new system is developed.

3.4.2.2 *Existing TRSD customers that experience issues with onsite systems prior to available connection to the new TRSD system*

These customers must contact GCWD for assistance for temporary solutions. GCWD is responsible for the area's environmental protection and receives its authority by delegation from ADEQ. GCWD is committed to find temporary solutions that benefit both the environment and the customer while continuing to meet ADEQ requirements. These solutions will vary based on the specific issue and the timing of connection to the TRSD system.

3.4.2.3 *Existing and new customers seeking a building permit prior to available connection to the TRSD system*

These customers must follow Gila County's existing building permit process. TRSD will be collaborating with Gila County to revise its building permit checklist to include a requirement that during the permitting process, any customer that lies

within the TRSD DMA boundary will need to contact TRSD and obtain a TRSD Wastewater Treatment Service Acknowledgment Form. This form will be issued to address the customers' specific situation regarding wastewater treatment. This form will address situations such as:

- Acknowledgment by customer that a new wastewater collection and treatment system will be available and customer will be required to connect and will be receiving a TRSD bill. The anticipated timing of connection will be provided.
- Acknowledgment by customer that should they experience issues with an existing onsite system prior to connection that they must contact GCWD for assistance in compliance until the TRSD system is available.
- Acknowledgment by customer that should they install a new onsite treatment system that they will be required to connect to the TRSD systems once wastewater treatment is available at the customer location.
- Acknowledgment by customer that should they elect to refuse the initial service connection, they will still be responsible for the assessment that will finance the availability of service to the property. Then, if in the future they wish to connect, customer may be charged a tap/connection fee and will be responsible for the cost to run the lateral from their existing home to the main line, including the 2-way building cleanout.

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4 Construction

4.1 Construction Summary

The main scheduling element that will drive the project schedule is the funding process, as TRSD will be pursuing United States Department of Agriculture Rural Development (USDA-RD) funding for all phases. Currently, TRSD has pursued funding through the USDA-RD for Phase I of III. In August of 2018, the USDA-RD issued a Letter of Conditions (LOC) offering TRSD funding for Phase I and consists of about 57% grant and about 43% loan. TRSD intends to immediately begin the process of pursuing funding for the remaining phases.

Phase I design has been broken up into two projects, the collection system and the WRF, respectively. The anticipated design completion of the collection system is third quarter of 2023 and the WRF is first quarter of 2024. Phase I construction is estimated at approximately 16-20 months to completion. Within the construction period, the WRF will be constructed, taking about 8-12 months, it is anticipated that both projects completion will be in the 3Q of 2025. Each additional phase will follow and have similar design and construction times. It is the intent of TRSD that these phases will overlap to bring completion of full buildout in late 2026 to mid-2027.

Service connections will be connected to the system as the infrastructure is constructed and the treatment facility is online and ready for influent flows. For example, in Phase I, after the WRF is completed and online, each individual property will have a lateral installed from the newly constructed main line to the connection at the residence or business. At this time, the system will be live and begin accepting these flows for treatment. Once connected, the onsite wastewater treatment system will be abandoned (in place) and then the yard will be restored. This process will be similarly executed in the other phases as well.

Some key design and constructability problems that will need to be addressed are as follows:

- Special care will need to be exercised with regard to excavation as some challenges may arise with old, abandoned and unrecorded existing utilities.
- Traffic control could pose some potential challenges to the construction schedule and maintaining access for homeowners who live adjacent to construction activities.
- Floodways:
 - Portions of the collection mains and the WRF may have to be installed within floodways. USACE Section 404 permit issues may have to be addressed during final design.
 - Per ADEQ in AAC R-18-9-E301.D.2.c, sewer lines crossing or constructed in floodways need to be installed 2' below the 100-year storm scour depth or scour protection shall be provided if the depth cannot be maintained.
- Narrow Streets: Pavement widths are less than 25 feet wide.
 - Many of the main lines are within narrow residential streets. This makes access to and from the homes difficult during construction operations.
 - Narrow streets create design and construction difficulties. Care must be taken during the main line design to ensure adequate separation is maintained from other utilities like gas, water and electricity that need to be avoided to keep relocation costs low.
 - Potential asphalt variation may create issues.
- Steep Terrain: Much of the TRSD area is constructed within steep, mountainous terrain. Care must be taken during the design to ensure that the collection line is installed at reasonable slopes.

4.2 Phasing

The construction of each phase will be strategized to ensure WRF capacity is operational prior to the completion of the associated phased collection system.

Table 10 – TRSD Phasing

Phase	Year Capacity Available	Flow Capacity (GPD)	EDUs	Estimated Population	Treatment Capacity
Phase I	2025	240,402	1,374	2,457	0.25 MGD
Phase II	2026	218,925	1,251	2,535	0.15 MGD
Phase III	2027	192,442	1,084	1,741	0.10 MGD
Totals at Full Buildout		651,768	3,709	6,733	0.65 MGD

4.3 Construction Agencies

Following guidelines of the USDA-RD for construction procurement, TRSD will follow USDA-RD requirements for free and open competition. Each phase will be put out to public bid to obtain a licensed general contractor to facilitate and manage the construction of the awarded project phase.

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5 Impact

Overall, the impact to the community from the TRSD Wastewater Collection and Treatment Project will be beneficial. With the majority of the residential properties within TRSD utilizing onsite treatment systems and being in violation of the CWA, AAC, and or ADEQ regulations, the implementation of this project will improve environmental conditions. The public health conditions will improve because of the decommissioning of the failing and/or failed onsite wastewater systems thereby cleaning up the groundwater and stormwater runoff by reducing pollution risk.

With the installation of a collection and treatment system will bring value to the area and potentially create an atmosphere supportive of property development. Gila County Wastewater Division Manager agrees that the project will be economically beneficial to the residents and businesses because an increase in property values can encourage the refilling of abandoned homes and improve the overall improvement of the quality of life in the area.

Potential adverse impacts are associated with the results of conducting a large construction project. However, most of these potential adverse impacts can be minimized or avoided by employing Best Management Practices (BMPs). These include following proper regulatory agency guidelines and permitting process to ensure proper execution of the project to support environmental protection. During construction, there will be possible traffic interruption, but it is only a temporary inconvenience.

5.1 Surface Water

5.1.1 Potential Adverse Impacts

The potential adverse impacts to the surface water in the area and the BMPs that will be employed to minimize these impacts are described below.

5.1.1.1 *Jack and Bore Activities with Jurisdictional Waters of the United States*

Adverse Impact:

Potential crossings that will require jack and bore activities within jurisdictional waters of the United States

BMP:

Ensure construction activities comply with the requirements of the Section 404 Permit and Section 401 Water Quality Certification. Logan Simpson (2018) summarizes these practices:

To comply with the terms and conditions of these permits, discharges of fill or dredged material (including all earthwork activities, such as clearing, grading, filling, and excavating) into watercourses would be minimized or avoided to the maximum extent practicable. Fill or dredged material would not involve the use of unsuitable material or pollutants in toxic amounts. In addition, no excess concrete, curing agents, formwork, loose embankment materials, or fuel would be disposed of within the project area. Additionally, vegetation cover similar to present levels would be reestablished relatively quickly reducing the potential for soil erosion and increased sedimentation. (p. 44)

5.1.1.2 *Stormwater Runoff*

Adverse Impact:

Potential increase in stormwater runoff

BMP:

Logan Simpson (2018) explains:

As part of the AZPDES permit, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented, which would minimize potential sediment transport by requiring the use of stormwater and erosion control BMPs. (p. 45)

Gila County has developed a Grading and Drainage Ordinance (Number 08-01) to promote the public health, safety, and general welfare, and to minimize public and private losses by regulating grading and drainage of all

land within the unincorporated area of Gila County, Arizona. The [TRSD project] would require obtaining a grading permit from the Gila County Public Works Director or designee. In addition, construction impacts would be confined to the minimum area necessary to complete the project. (p. 45)

5.1.1.3 Floodplain

Portions of the collection system may have to be installed in the floodplain. The design will be coordinated with Gila County to obtain a floodplain use permit as necessary and with the U.S. Army Corps of Engineers (USACE) 404 permit issues during design.

WRF and influent lift station – The location of the proposed WRF is outside of the 100-year floodplain (Exhibit 6 in Appendix G), and pumps and other wastewater infrastructure would be constructed outside the floodplain limits, where possible. The WRF is located within Zone D (FEMA FIRM Panel No. 04007C2104D effective December 4, 2007), near the boundaries of a 500-year floodplain. Zone D is an area with undetermined flood hazard, likely due to a lack of flood hazard analysis. A 500-year floodplain analysis was performed and determined it is not expected that the WRF would alter the 500-year floodplain.

Adverse Impact:

Potential risk to the new infrastructure (specifically the new TRSD WRF and influent lift station) if located within a floodplain, and risk of impacting flood flows or elevations by changing landscape with new construction.

BMP:

USDA-RD considers these critical facilities and will require they are built above the 500-year floodplain. Additionally, a flood study will be performed to ensure any infill performed to build these facilities above the 500-year floodplain will not adversely affect the floodplain elevation. As long as all Gila County and USACE processes are followed when constructing in the floodplains, Logan Simpson (2018) concludes:

The [TRSD project] would result in temporary disruptions to floodplains where construction activities within the 100-year floodplain are unavoidable. The construction related activities are not anticipated to change the floodplain elevation to a point that would impact the floodplain, either temporarily or permanently. No impacts on flood flows or flood elevations are anticipated as a result of the [TRSD project], as the [TRSD Project] would not permanently impede or redirect flows. Therefore, the [TRSD project] is anticipated to have no impacts to floodplains, provided the applicable BMPs are implemented. (p. 18)

5.1.2 Potential Beneficial Impacts

Logan Simpson (2018) describes the potential beneficial impacts to the surface water.

Beneficial Impact:

As a result of the stormwater control measures, implementation of the SWPPP, and compliance with necessary permits required for the construction and operation of the new facilities, no short-term direct or indirect [adverse] impacts to surface water would occur as a result of the [project]. Providing existing septic users, and potential future development, with connection to a municipal sewer system would eliminate potential [adverse] impacts to surface waters from septic fields and the sewage lagoons.... Long-term direct beneficial impacts would occur to surface water as failing septic systems are abandoned, thereby eliminating the risk of system failures and untreated wastewater being discharged into the environment.

Beneficial Impact:

It is anticipated that the majority of the effluent will be going to local beneficial reuse. However, initially and on occasion once the reuse program has been developed, approximately 200,000 gpd of Class A+ effluent is proposed for discharge to Miami Wash; located approximately 1,200 feet west of the proposed TRSD WRF. Miami Wash is a tributary of Pinal Creek and it is anticipated that the 200,000 gpd discharge of reclaimed water to Miami Wash would contribute to surface flow, thereby improving the ongoing clean-up efforts of the Pinal Creek WQARF site. The additional daily flows may help move contaminants in the drainageway downstream towards the WQARF water treatment plant, contributing to the overall environmental clean-up of the region. Flow to Miami Wash may also result in the ponding of water and establishment of wetlands and/or wildlife habitat downstream of the TRSD WRF.

5.2 Groundwater

The adverse impacts to area groundwater, similarly to the surface water, can be minimized or avoided by applying best management practices to the execution of the project such as the closure of the onsite treatment systems being performed according to Title 18 Chapter 9 of the AAC (R18-9-A309) General Provisions for On-site Wastewater Treatment Facilities, Section D.

The TRSD project will have significant beneficial impact to the area ground water; Logan Simpson (2018) illustrates:

As described in Section 1.2, the installation of a municipal sewer system and WRF would provide a municipal collection and treatment system within TRSD's [boundary]. Providing existing septic users and potential future development with connection to a municipal sewer system would eliminate potential groundwater pollution from septic fields. Connecting current septic users to a municipal sewer system would also help to protect the health and safety of the community through the protection of groundwater quality in the area. The installation of municipal sewer lines and construction of a WRF would eliminate potential groundwater pollution from approximately 810 nitrogen-rich septic tanks, which could contaminate the upper aquifer....

With the implementation of BMPs, compliance with any/all permits required for the project (including appropriate measures for the removal and/or closure of septic systems), no short-term direct or indirect [adverse] impacts to groundwater would occur as a result of the [project]. Connecting current septic users, and potential future development, to a municipal sewer system would help to protect the health and safety of the community through the protection of groundwater in the area. Long-term, direct, beneficial, impacts would occur to groundwater as failing septic systems are abandoned, thereby eliminating the risk of system failures and untreated wastewater potentially reaching the groundwater. Additionally, long-term, indirect, beneficial impacts would occur with the removal of failing septic tanks and the potential expedited clean up the Pinal Creek WQARF site. (p. 48)

For any projects built within the TRSD DMA boundary prior to services being available, TRSD will be collaborating with Gila County to revise its procedure for the issuance of building permits by having the applicant indicate whether the property lies within the boundary. Then TRSD and the Gila County will work with the applicant to ensure the owner will have proper onsite treatment until the new collection and treatment system is made available.

5.3 Air Quality

Logan Simpson (2018) outlines the potential air quality impacts:

Air emissions resulting from the [TRSD project] would include fugitive dust (PM_{2.5} and PM₁₀ emissions) associated with construction activities (such as trenching, grading, and installation of project elements), clearing of vegetation, and vehicles driving on unpaved surfaces. Exhaust from construction worker, material delivery vehicles, and other equipment during construction of the proposed site, such as portable electrical generators would result in localized, short-term increases in CO and NO_x emissions. Estimated emissions associated with the installation of the proposed sewer collection system were calculated during the preparation of the 2011 [Draft] Environmental Report [by AMEC] and were found "to be well below the general conformity thresholds defined under 40 CFR 51.853" (AMEC 2011). The WRF is less than one acre. With the inclusion of the WRF, emissions are still expected to remain below the *de minimis* thresholds of 100 tons per year for PM₁₀ and SO₂.

Potential air emissions from the operation of the proposed WRF would primarily occur at locations where liquid is turbulent, such as the aerated grit tanks, aerated channels, aeration basins, clarifier wells, or other areas that have high turbulence. Emissions would vary in relation to the flow received by the facility, maintenance, and odor control operations (e.g., prechlorination and chlorination to control algal growth). Use of the MBR process would reduce the footprint of the WRF and the need for secondary clarifiers and tertiary filtration process (The MBR Site 2017). In addition, the aeration basin volume may be able to be reduced. These improvements in technology would reduce the volume of air emissions from the facility. Infrequent use of a diesel-fueled emergency-power generator¹⁸ would also contribute to air emissions; however, emergency-power generators

typically run less than 200 hours per year and have a very small impact on local air quality (PLC Enterprises 2013). (p. 58-59)

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6 Permits

6.1 Aquifer Protection Permit

An ADEQ Individual Aquifer Protection Permit (APP) will be obtained to allow the operation of the new TRSD WRF. A Type 4.01 General APP will also be obtained for new wastewater collection system.

6.2 AZPDES Permit

An Arizona Pollutant Discharge Elimination System (AZPDES) will be obtained to permit the domestic discharge of the effluent generated by the TRSD WRF. These flows will be discharged into Miami Wash, which is a contributor to Pinal Creek. Typically, the BADCT plus filtration will meet AZPDES permit requirements, however, ADEQ may impose additional effluent quality limits on a facility that discharges into washes or ephemeral streams. Any required additional limits will not be known until the ADEQ permitting pre-application meeting during the early design phase.

6.3 CAG 208 Water Quality Plan Amendment

A CAG 208 Water Quality Management Plan Amendment will be submitted for the statewide planning of this new collection and treatment system.

6.4 Construction Permits

It is anticipated that the following construction permits will be required:

- 4.01 General Permit Notice of Intent to Discharge
- Discharge Authorization
- Stormwater Pollution Prevention Permit (SWPPP)
- Dust Control Permit

6.5 Local Floodplain and Drainage Regulations

Portions of the collection system may have to be installed in the floodplain. As necessary, the Engineer will coordinate with Gila County concerning the floodplain use permit and the U.S. Army Corps of Engineers (USACE) 404 permit issues during design.

6.6 Sludge Management

The biosolids will be dewatered for disposal in a landfill. All processes of treatment, handling and selection of disposal facility will be properly permitted under the ADEQ AZPDES program and carried out according to the associated regulations. These regulations include:

- Arizona Revised Statutes (ARS) Chapter 49 The Environment, Article 3.1 Arizona Pollutant Discharge Elimination System Program
- Arizona Administrative Code (AAC) Title 18 Environmental Quality
 - Chapter 09, Article 10: Arizona Pollutant Discharge Elimination System – Disposal, Use, and Transportation of Biosolids
- Clean Water Act as amended (33 U.S.C. §1251 et seq.)
- Code of Federal Regulations (CFR)
 - 40 CFR258: Criteria for Municipal Solid Waste Landfills

7 Finance Information

TRSD is an Arizona Sanitary District, established in 2011, formed with a foundation and mission to improve the quality of life for the Tri-City area of southern Gila County, Arizona by developing a plan to provide and manage a new wastewater collection and treatment system. As a sanitary district, TRSD has the authority, with formal support of its users, to incur debt and levy a tax for providing a community service to those within its boundaries. The TRSD legal counsel has included a self-certification statement and legal opinion (Appendix B) that upon the completion of this amendment, ADEQ certification of and official EPA approval of the TRSD designation as DMA, TRSD will have the authority to manage this existing DMA boundary and implement the plan for this project. Appendix B also includes a letter certifying the TRSD financial capability of executing and management of this project.

In the pursuit of funding, due to the magnitude of the overall project, it will be implemented with a three-phase approach. TRSD has pursued funding through the USDA-RD for Phase I of III. Through the funding application process, TRSD has procured a Preliminary Engineering Report (PER) and Environmental Assessment (EA) for Phase I of this project. The PER includes an engineer's estimate that considers all potential construction, non-construction and operation and maintenance (O&M) costs.

In August of 2018, the USDA-RD issued a Letter of Conditions (LOC) offering TRSD funding for Phase I and consists of about 57% grant and about 43% loan. Since the project is within a designated Colonia area with a Median Household Income (MHI) of approximately \$26,000, a portion of the USDA-RD grant is Colonia grant funding. These grant funds will be utilized for the following:

- The abandonment in place of existing residential cesspools and septic systems
- Installation of laterals from existing homes to the new mains including 2-way building cleanout

TRSD intends to immediately begin the process of pursuing funding for the remaining phases.

7.1 Project Financing

The project will be financed through three sources:

1. Ad Valorem Tax

At this time, TRSD intends to continue its current taxing of all customers to cover administrative costs in order to avoid customers in any one phase to be overburdened. Administrative costs may include items such as management, insurance, safety training, bookkeeping, etc.

2. Operation and Maintenance (O&M) Fee

The wastewater collection and treatment system O&M costs presented in the PER were estimated for TRSD based on similar rural communities throughout Arizona. These costs include a reserve fund for short-lived assets as required by USDA-RD. These reserves are established to assist TRSD with pump and motor replacement, non-routine maintenance, and small equipment replacement, etc. The TRSD O&M fee will be distributed between the residents being served based on the equivalent dwelling units (EDUs) of their property. Per ARS 48-2027(G)(5) an availability fee may be charged to vacant parcels and this fee is limited to 50% of the user fee.

3. Debt Repayment

Primary funding for the project is through the USDA-RD Rural Utilities Service (RUS) program. Repayment for the loan portion of the USDA-RD funding will be repaid based on a per EDU amount. This loan repayment will be assessed and collected through the Gila County Assessor's Office. Homeowners will be offered a one-time cash buyout option or 40-year installment option.

7.2 Financial Status

The current annual expenditures of the TRSD are minimal, as it does not operate or maintain any wastewater infrastructure at this time. The revenues are currently obtained through Gila County Secondary Tax Assessments.

The TRSD annual revenues and expenditures are summarized in the following

Table 11 - TRSD Actual Annual Revenues and Expenditures.

The tax revenues are secured by Gila County on an annual basis. Since 2015, the State uses one type of property value for taxing purposes, known as the Limited Property Value (LPV).

Table 11 - TRSD Actual Annual Revenues and Expenditures

Category	2017	2018	2019
Cash on Hand	\$ 207,737	\$ 250,209	\$ 179,690
Revenues			
Interest	\$ 1,205	\$ 2,109	\$ 4,218
Secured Taxes	\$ 96,668	\$ 102,963	\$ 152,407
Unsecured Taxes	\$ 1,211	\$ -	\$ 1,913
WIFA Planning Grant	\$ -	\$ -	\$ -
Total Revenues	\$ 99,084	\$ 105,072	\$ 158,538
Expenses			
Legal Fees	\$ 31,363	\$ 18,913	\$ 102,463
Board Expenses	\$ -	\$ -	\$ 7,201
Facilities and Equipment	\$ -	\$ -	\$ 340
Web page	\$ 725	\$ 683	\$ 770
Publishing / Printing	\$ 87	\$ 1,586	\$ 4,982
Office Supplies / Postage	\$ 110	\$ 116	\$ 2,824
Travel	\$ 427	\$ 193	\$ 454
Special Elections - Gila County	\$ -	\$ -	\$ -
Part Time District Manager	\$ -	\$ -	\$ -
Engineering	\$ -	\$ 36,147	\$ 100,853
WIFA Grant Match	\$ -	\$ -	\$ -
WIFA Grant (Assessment)	\$ -	\$ -	\$ -
Insurance - Liability	\$ 1,129	\$ 4,787	\$ 4,850
Legal / Land / Admin (WIFA soft Money Loan)	\$ -	\$ -	\$ -
Accounting / Bookkeeping	\$ 439	\$ 174	\$ 718
Total Expenses	\$ 34,280	\$ 62,599	\$ 225,455

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8 References

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Appendix A

Section 208 CWA Checklist

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**Section 208 Clean Water Act
40 CFR Part 130.6**

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
<p><u>AUTHORITY</u></p> <p>1) 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.</p>	<p>TRSD's DMA designation was previously approved with CAG 208 Plan Amendment #2017-02. A self-certification letter is enclosed in Appendix B.</p>	<p>2-2, Appendix B, Appendix D</p>
<p><u>20-YEAR NEEDS</u></p> <p>Clearly describe the existing wastewater treatment (WWT) facilities:</p> <p>2) Describe existing WWT facilities.</p>	<p>Currently, there are no physical TRSD facilities. All proposed TRSD facility locations are illustrated on Exhibit 2 Preliminary Collection & Treatment System.</p>	<p>2-1, Appendix G (Exhibit 2)</p>
<p>3) Show WWT certified and service areas for private utilities and sanitary district boundaries if possible.</p>	<p>TRSD's DMA designation was previously approved with CAG 208 Plan Amendment #2017-02. With this 208 amendment, TRSD is requesting that the WRF site, located just north of the northern portion of the TRSD boundary, be added to the TRSD DMA. The TRSD boundary with legal descriptions are included in Appendix D. Also included is the legal description for the new WRF site that will be added to the TRSD boundary. Exhibit 7 (Appendix G) shows the current and proposed expanded DMA.</p>	<p>2-1, 2-2, 2-3, Appendix D, Appendix G</p>
<p>Clearly describe alternatives and the recommended WWT plan:</p> <p>4) Provide POPTAC population estimates (or COG-approved estimates only where POPTAC not available) over 20-year period.</p>	<p>To develop a reasonable estimate of the population trends and growth within the TRSD, the growth patterns in the surrounding Census Designated Places were considered. Precise population records for the TRSD are not available, however, information has been gathered from the Environmental Justice Screening and Mapping Tool (EJSCREEN) provided by the Environmental Protection Agency (EPA) to gain an understanding of the affected population for this project by drawing out the boundary to get a more accurate population. Based on the 2010 census data and the EPA average growth of 3%, over the 20-year</p>	<p>2-5 to 2-9, Appendix H</p>

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	planning period, the population could reach approximately 9,500. However, when considering the historical data for this area, 3% is a high estimate.	
5) Provide wastewater flow estimates over the 20-year planning period.	Without precise population estimates, the design capacity estimate of 0.65 MGD is based on a methodology was developed to estimate reasonable growth through an understanding of potential equivalent dwelling units (EDU) and projected wastewater flows. 175 GPD/EDU was used to estimate flow of this proposed new collection system.	2-7 to 2-9
6) Illustrate the WWT planning and service areas.	TRSD's DMA designation was previously approved with CAG 208 Plan Amendment #2017-02. With this 208 amendment, TRSD is requesting that the WRF site, located just north of the northern portion of the TRSD boundary, be added to the TRSD DMA. The TRSD boundary with legal descriptions are included in Appendix D. Also included is the legal description for the new WRF site that will be added to the TRSD boundary. Exhibit 7 (Appendix G) shows the current and proposed expanded DMA.	2-1, 2-2, 2-3, Appendix D, Appendix G
7) Describe the type and capacity of the recommended WWT Plant.	The proposed new 0.65 MGD MBR WRF facility will consist of a headworks system, secondary activated sludge process with membrane filtration and disinfection (either chlorination or ultraviolet).	2-1, 3-1
8) Identify water quality problems, consider alternative control measures, and recommend solution for implementation.	Nearly 90% of the residential properties within TRSD have onsite treatment systems (cesspools and substandard septic tanks) in violation of the CWA, Arizona Administrative Code (AAC), and/or ADEQ regulations. This poses risks of groundwater pollution. Connecting current septic users, and potential future development, to a municipal wastewater collection system would help to protect the health and safety of the community through the protection of groundwater in the area. Long-term, direct, beneficial, impacts would occur	1-3 to 1-4, 3-1 to 3-3, 5-1 to 5-4

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	to groundwater as failing septic systems are abandoned, thereby eliminating the risk of system failures and untreated wastewater potentially reaching the groundwater.	
9) 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?	Not applicable.	
10) Describe method of effluent disposal and reuse sites (if appropriate).	Due to the ongoing flushing process of Pinal Creek, one mining company, FMI (mining company), has expressed interest in the flows being discharged into Miami Wash which is a contributor to Pinal Creek. This would contribute to the overall environmental cleaning within the region. A specific discharge point has not been determined, but an estimated area is indicated.	2-1, 3-2 to 3-3, 5-2, Appendix G (Exhibit 3)
11) If Sanitary Districts are within a proposed planning or service area, describe who serves the Sanitary Districts and when.	Tri-City Regional Sanitary District (merger of Cobre Valley Sanitary District and Pinal Sanitary District) is the only sanitary district within the boundary and does not currently serve any customers. The proposed project within this CAG WQMP 208 amendment will be the commencement of service by this sanitary district.	2-1
12) Describe ownership of land proposed for plant sites and reuse areas.	Land will need to be acquired for the installation of the new TRSD WRF and the construction of the regional lift stations and the neighborhood lift stations. The actual land requirements will be determined during the engineering design phase of the improvements. TRSD is in the process of acquiring a parcel from BHP, via donation, for the location of the proposed new WRF. Additional details are discussed in Section 3 Wastewater Treatment Facility. The new TRSD Lift Station in Phase I is located on a parcel owned by FMI	2-1, 2-4, 3-1, Appendix G (Exhibit 3 & Exhibit 4)

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	which TRSD has obtained an easement for this infrastructure.	
13) Address time frames in the development of the treatment works.	Phase I design has been broken up into two projects, the collection system and the WRF, respectively. The anticipated design completion of the collection system is 3Q of 2023 and the WRF is 1Q of 2024. Phase I construction is estimated at approximately 16-20 months to completion. Within the construction period, the WRF will be constructed, taking about 8-12 months, it is anticipated that both projects completion will be in the 3Q of 2025. Each additional phase will follow and have similar design and construction times. It is the intent of TRSD that these phases will overlap to bring completion of full buildout in late 2026 to mid-2027.	4-1 to 4-2
14) Address financial constraints in the development of the treatment works.	The major constraint is the median household income (MHI) of the area that creates a financial hurdle; however, TRSD has pursued funding through the USDA-RD for Phase I of III and intends to immediately begin the process of pursuing funding for the remaining phases. In August of 2018, the USDA-RD issued a Letter of Conditions (LOC) offering TRSD funding for Phase I and consists of about 57% grant and about 43% loan.	7-1
15) Describe how discharges will comply with EPA municipal and industrial stormwater discharge regulations (Section 405, CWA).	This facility will be designed to accept 100% domestic wastewater flows for treatment. Industrial / commercial wastewater will not be accepted without pretreatment. Any future industrial / commercial wastewater acceptance will require TRSD Board action. At that time, the policies and procedures will be developed to ensure any discharge accepted will meet the ADEQ / EPA Pretreatment Standards. The treatment facility will not include a septage receiving station. Currently within the area, two options for septage receiving are at the Town of Miami and the Superstition Mountain Community Facilities District in	3-2

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	Apache Junction.	
16) Describe how open areas and recreational opportunities will result from improved water quality and how those will be used.	Overall, with the reduction of groundwater contamination risks by implementing this centralized wastewater collection and treatment system the environmental quality in private yards and common areas throughout TRSD will be improved. Currently, there are a couple of available options for potential effluent reuse for open and recreational areas; however, at this time TRSD is not pursuing these options. 1) The local golf course, Cobre Valley County Club (CVCC) has expressed interest in obtaining the effluent for irrigation of the course. CVCC struggles to obtain enough water to keep the course green. 2) Discussions have taken place regarding the utilization of the effluent to create a lake with a surrounding regional community park constructed for recreational use, providing an amenity for the area.	3-2 to 3-3
17) Describe potential use of lands associated with treatment works and increased access to water-based recreation, if applicable.	The WRF and lift station land will be used solely for the facility structure. There has been discussions of future use of the effluent to create a lake whereby a regional park be constructed around the lake for use by all who live with in the area. It would provide an amenity for the region.	3-3
<u>REGULATIONS</u>	Anticipated permit requirements are as follow: <ul style="list-style-type: none"> • Individual ADEQ Aquifer Protection Permit (APP) • Arizona Pollutant Discharge Elimination System (AZPDES) • Construction Permits <ul style="list-style-type: none"> ○ 4.01 General Permit Notice of Intent to Discharge ○ Discharge Authorization ○ Stormwater Pollution Prevention Permit (SWPP) ○ Dust Control Permit • U.S. Army Corps of Engineers (USACE) 404 	6-1
19) Describe restrictions on AZPDES permits, if needed, for discharge and sludge disposal.	The biosolids will be dewatered for disposal in a landfill. All processes of treatment, handling and selection of disposal facility will be properly permitted under the ADEQ AZPDES	3-1, 6-1

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	<p>program and carried out according to the associated regulations. These regulations include:</p> <ul style="list-style-type: none"> • Arizona Revised Statutes (ARS) Chapter 49 The Environment, Article 3.1 Arizona Pollutant Discharge Elimination System Program • Arizona Administrative Code (AAC) Title 18 Environmental Quality <ul style="list-style-type: none"> ○ Chapter 09, Article 10: Arizona Pollutant Discharge Elimination System – Disposal, Use, and Transportation of Biosolids • Clean Water Act as amended (33 U.S.C. §1251 et seq.) • Code of Federal Regulations (CFR) <ul style="list-style-type: none"> ○ 40 CFR258: Criteria for Municipal Solid Waste Landfills 	
<p>20) Provide documentation of communication with ADEQ Permitting Section 30 to 60 days prior to public hearing regarding the need for specific permits.</p>	<p>Typically, an ADEQ pre-application meeting for permitting takes place during the design phase. At this time, the no communication with ADEQ has taken place regarding specific permit requirements. The pre-application meeting with ADEQ will be schedule in the near future.</p>	<p>3-3</p>
<p>21) Describe pretreatment requirements and method of adherence to requirements (Section 208 (b)(2)(D), CWA).</p>	<p>This facility will be designed to accept 100% domestic wastewater flows for treatment. Industrial / commercial wastewater will not be accepted without pretreatment. Any future industrial / commercial wastewater acceptance will require TRSD Board action. At that time, the policies and procedures will be developed to ensure any discharge accepted will meet the ADEQ / EPA Pretreatment Standards. The treatment facility will not include a septage receiving station. Currently within the area, two options for septage receiving are at the Town of Miami and the Superstition Mountain Community Facilities District in Apache Junction.</p>	<p>3-2</p>
<p>22) Identify, if appropriate, specific pollutants that will be produced from excavations and procedures that will protect</p>	<p>Best management practices will be applied during</p>	<p>5-1 to 5-4</p>

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
ground and surface water quality (Section 208(b)(2)(K) and Section 304, CWA).	construction to protect surface water and groundwater.	
23) Describe alternatives and recommendation in the disposition of sludge generated. (Section 405 CWA)	Biosolids will be produced by the proposed WRF. At full buildout, the facility will produce approximately 1,200 lbs per day. Biosolids land application is a future possibility; however, this option is not being considered at this time. The biosolids will be dewatered for disposal in a landfill. All processes of treatment, handling and selection of disposal facility will be properly permitted under the ADEQ AZPDES program and carried out according to the associated regulations.	2-2, 3-1, 6-1
24) Define any nonpoint issues related to the proposed facility and outline procedures to control them.	<p>The construction of the wastewater facilities will not be a significant source of pollution. Anticipated pollution from construction activities includes fugitive dust, construction equipment exhaust emissions, and construction related solid waste. Erosion control measures during construction and grading will be implemented to prevent potential stormwater runoff to water bodies. The contractor shall comply with local and county regulatory requirements and provisions of construction permits issued including dust control permits. The proposed TRSD WRF will be creating a point source for the community and will alleviate any potential issues due to failing septic systems. Should any issue arise, TRSD will immediately notify ADEQ and work to perform any required mitigation.</p> <p>The construction of the wastewater reclamation facilities will not be a significant source of pollution. Anticipated pollution from construction activities includes fugitive dust, construction equipment exhaust emissions, and construction related solid waste. Erosion control measures during construction and grading will be implemented to prevent potential storm water runoff to water bodies. The developer</p>	5-1 to 5-4

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	and project contractor shall comply with local and county regulatory requirements and provisions of construction permits issued including dust control permits.	
25) Describe process to handle all mining runoff, orphan sites and underground pollutants, if applicable.	N/A	N/A
26) If mining related, define where collection of pollutants has occurred, and what procedures are going to be initiated to contain contaminated areas.	N/A	N/A
27) If mining related, define what specialized procedures will be initiated for orphan sites, if applicable.	N/A	N/A
<p><u>CONSTRUCTION</u></p> <p>28) Define construction priorities and time schedules for initiation and completion.</p>	<p>Phase I design has been broken up into two projects, the collection system and the WRF, respectively. The anticipated design completion of the collection system is 3Q of 2023 and the WRF is 1Q of 2024. Phase I construction is estimated at approximately 16-20 months to completion. Within the construction period, the WRF will be constructed, taking about 8-12 months, it is anticipated that both projects completion will be in the 3Q of 2025. Each additional phase will follow and have similar design and construction times. It is the intent of TRSD that these phases will overlap to bring completion of full buildout in late 2026 to mid-2027.</p>	4-1
29) Identify agencies that will construct, operate and maintain the facilities and otherwise carry out the plan.	<p>Following guidelines of the USDA-RD for construction procurement, TRSD will follow USDA-RD requirements for free and open competition. Each phase will be put out to public bid to obtain a licensed general contractor to facilitate and manage the construction of the awarded project phase. Once constructed, the facility will be owned and operated by TRSD.</p>	N/A
30) Identify construction activity-related sources of pollution and set forth procedures and methods to control, to the extent	Anticipated pollutants during constructions may include dust,	5-1 to 5-4, 6-1

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
feasible, such sources.	related solid waste, etc. Best management practices will be applied and outlined in the SWPPP.	
<u>FINANCING AND OTHER MEASURES NECESSARY TO CARRY OUT THE PLAN</u>	N/A	N/A
31) If plan proposes to take over certificated private utility, describe how, when and financing will be managed.		
32) Describe any significant measure necessary to carry out the plan, e.g., institutional, financial, economic, etc.	Securing adequate funding	7-1
33) Describe proposed method(s) of community financing.	Grants, loans, ad valorem tax, operation and maintenance fee, and debt repayment assessed and collected through the Gila County Assessor's Office	7-1
34) Provide financial information to assure DMA has financial capability to operate and maintain wastewater system over its useful life.	Financial capability letter is provided in Appendix C.	7-1, Appendix C
35) Provide a time line outlining period of time necessary for carrying out plan implementation.	<p>Provided funding of all phases is obtained in a timely manner, the facility timeline for full buildout is as follows:</p> <p>Phase I 2025 Phase II 2026 Phase III 2027</p>	4-1
36) Provide financial information indicating the method and measures necessary to achieve project financing. (Section 201 CWA or Section 604 may apply).	<p>TRSD will be pursuing USDA-RD funding assistance for each phase of this project individually. This funding will be a combination of both grant and low-interest loans. The project will be financed through three sources:</p> <ol style="list-style-type: none"> 1. Ad Valorem Tax 2. Operation and Maintenance (O&M) Fee 3. Debt Repayment 	7-1

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
<p><u>IMPLEMENTABILITY</u></p> <p>37) Describe impacts and implementability of Plan.</p>	<p>Overall, the impact to the community from the TRSD Wastewater Collection and Treatment Project will be beneficial. With the majority of the residential properties within TRSD utilizing onsite treatment systems and being in violation of the CWA, AAC, and or ADEQ regulations, the implementation of this project will improve environmental conditions. The public health conditions will improve by the decommissioning of the failing and/or failed onsite wastewater systems thereby cleaning up the groundwater and stormwater runoff by reducing pollution risks. The installation of a collection and treatment system will bring value to the area and potentially create an atmosphere supportive of property development. Potential adverse impacts are associated with the results of conducting a large construction project, most of which can be minimized or avoided by employing best management practices (BMPs). These include following proper regulatory agency guidelines and permitting process to ensure proper execution of the project to support environmental protection. During construction, there will be possible traffic interruption, but it is only a temporary inconvenience.</p>	5-1 to 5-4
<p>38) Describe impacts on existing wastewater (WW) facilities, e.g., Sanitary district, infrastructure/facilities and certificated areas.</p>	<p>There are two wastewater treatment facilities in the area of the TRSD boundary at the City of Globe and the Town of Miami. TRSD Phase I will not affect either facility. Connecting to these facilities and/or other collaborations (for example shared operations staff) will be explored for the future Phases II and III.</p>	N/A
<p>39) Describe how and when existing package plants will be connected to a regional system.</p>	<p>There are currently no plans for connecting a regional system during TRSD Phase I. Collaborating with other plants will be explored for the future Phases II and III.</p>	N/A
<p>40) Describe the impact on communities and businesses affected by the plan.</p>	<p>Overall, the impact to the community from the TRSD Wastewater Collection and Treatment Project will be</p>	5-1 to 5-4

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	<p>beneficial. With the majority of the residential properties within TRSD utilizing onsite treatment systems and being in violation of the CWA, AAC, and or ADEQ regulations, the implementation of this project will improve environmental conditions. The public health conditions will improve by the decommissioning of the failing and/or failed onsite wastewater systems thereby cleaning up the groundwater and stormwater runoff by reducing pollution risks. With the installation of a collection and treatment system will bring value to the area and potentially create an atmosphere supportive of property development. Potential adverse impacts are associated with the results of conducting a large construction project, most of which can be minimized or avoided by employing best management practices (BMPs). These include following proper regulatory agency guidelines and permitting process to ensure proper execution of the project to support environmental protection. During construction, there will be possible traffic interruption, but it is only a temporary inconvenience.</p>	
<p>41) If a municipal 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).</p>	<p>TRSD has been and will continue working closely with Gila County Wastewater Division (GCWD) to ensure all current residents and new customers are supported during the development/construction phases of this project and thereafter. All permitting will continue to be facilitated through Gila County. Existing customers that have no immediate need for any changes to their property and have onsite treatment systems that are in working condition will be contacted to coordinate connection as the new system is developed. Existing customers that experience issues with onsite systems prior to available connection to the new TRSD system must contact GCWD for assistance for temporary solutions. GCWD is responsible for the area's environmental protection and receives its authority by delegation from ADEQ. GCWD is committed to find temporary solutions that benefit both the environment and the customer. These solutions will vary based on the specific issue and the timing of connection to the TRSD system. Existing and new customers seeking a building permit prior to available connection to the TRSD system must follow Gila County's existing building permit process. TRSD will be collaborating with Gila County to revise its</p>	<p>3-3</p>

Requirement	Provide Brief Summary On How Requirements Are Addressed	Addressed On Page
	building permit checklist to include a requirement that during the permitting process, any customer that lies within the TRSD DMA boundary will need to contact TRSD and obtain a TRSD Wastewater Treatment Service Acknowledgment Form. This form will be issued to address the customers' specific situation regarding wastewater treatment.	
<p><u>PUBLIC PARTICIPATION</u></p> <p>42) 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)</p>	CAG Responsibility	
<p>43) List location where documents are available for review at least 30 days before public hearing.</p>	CAG Responsibility	
<p>44) 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.</p>	CAG Responsibility	
<p>45) Submit affidavit of publication for official newspaper publication.</p>	CAG Responsibility	
<p>46) Submit responsiveness summary for public hearing.</p>	CAG Responsibility	

Appendix B

Self-Certification Letter

DRAFT



April 20, 2023

Andrea Robles, CAG Executive Director
Central Arizona Governments
2540 West Apache Trail – Suite 108
Apache Junction, Arizona 85120-5292

Re: Self Certification Letter re Tri-City Reginal Sanitary District

Dear Ms. Robles:

My office is general counsel to the Tri-City Regional Sanitary District (“TRSD”), an Arizona Sanitary District. In connection with the planned wastewater collection and treatment facilities that are planned to serve the residences, businesses, industries and other users within the District (which wastewater facilities are referred to in this letter as the Subject Facilities), I hereby certify as follows:

1. The TRSD was formed on June 20, 2011 by the merger of the Pinal Sanitary District and the Cobre Valley Sanitary District as set forth in A.R.S. § 48-2001.01.
2. Pursuant to the Clean Water Act Section 208(c)(2) [33 U.S.C. § 1288(c)(2)], TRSD is authorized by law to:
 - a. carry out appropriate portions of the Central Arizona Governments’ Section 208 Water Quality Management Plan (the “208 Plan”) developed under Clean Water Act Section 208, Subsection (b);
 - b. manage effectively the Subject Facilities and any other wastewater treatment works and related facilities serving such area in conformance with the 208 Plan;
 - c. directly or by contract, design and construct the Subject Facilities and any other new works, and to operate and maintain new and existing works as required by the 208 Plan;
 - d. accept and utilize grants, or other funds from any source, for wastewater treatment and management purposes;

Mesa:
3514 North Power Road
Building 1, Suite 103
Mesa, AZ 85215

☎ 480.500.5700
☎ 480.718.7728

Payson:
111 West Cedar Lane
Suite C
Payson, AZ 85541

☎ 928.474.9230
☎ 928.492.1888

Online:
www.harperazlaw.com
info@harperazlaw.com

- e. raise revenues, including the assessment of wastewater treatment charges;
- f. incur short- and long-term indebtedness;
- g. assure the implementation of the 208 Plan within the TRSD;
- h. refuse to receive any wastewater from any customer of TRSD which does not comply with any provisions of the 208 Plan applicable to TRSD; and
- i. accept industrial wastes for treatment.

Please let me know if you need any additional information in connection with this Self-Certification.

Very truly yours,

HARPER LAW OFFICES, PC



Michael J. Harper, Esq.

/lac
Enclosures as noted

DRAFT

Appendix C

Letters of Support

DRAFT

Gila County Health & Emergency Management



5515 South Apache Ave., Suite 100, Globe, AZ 85501
PHONE: (928) 402-8811 | FAX: (928) 425-8817



110 W. Main St., Suite A, Payson, AZ 85541
PHONE: (928) 474-1210 | FAX: (928) 474-7069

October 5, 2023

Central Arizona Governments
Environmental Planning Committee
Via E-mail

RE: TRSD Treatment Plant Location

Dear EPC Members,

I am writing in support of the TRSD's proposal to relocate the treatment plant from the location shown in their approved Section 208 Area Wide Water Quality Management Plan Amendment. The original location was negated due to its proximity to a retention dam and concerns raised about dam stability based on dam failures at other BHP properties worldwide. TRSD has scoured the area to locate a suitable property and have found a perfect replacement.

The selected property is located in a remote section of the lowest elevation land in the district and is not near any housing areas. It is adjacent to a cattle loading facility and a railroad spur in an area zoned for these types of activities. This location has been donated to TRSD. Furthermore, this location is preferred by both the PACE engineering team's project team and that of USDA-RD.

I would be remiss if I did not take this opportunity to express my wholehearted support for the TRSD Wastewater Collection and Water Reclamation Facility Project.

Respectfully,

Jake Garrett, P.E.
Environmental Engineer
Gila County health and Emergency Management Department
Environmental Health Division Manager
608 E. Hwy 260
Payson, AZ 85541
Tel: 928-474-7177
Fax: 928-474-0802



GILA COUNTY

Tim Humphrey, District 2

1400 E. Ash Street
Globe, Arizona 85501

November 6, 2023

RE: Tri-City Regional Sanitary District – Gila County, Arizona

To Whom it May Concern:

As District 2 Supervisor for Gila County, I submit this letter of support for the Tri-City Regional Sanitary District.

- This project will address public health concerns by replacing leaking and problematic cesspools and failing septic systems in our community and will provide hygienic sewer collection and treatment improving the public health and wellbeing.
- This project will increase property values in the region. Over 90% of the residences in the district have noncompliant sewer service. This noncompliance makes it impossible for residents to obtain regular mortgages and financing for their homes and businesses. Implementation of the TRSD sewer improvements will improve access to financing and increase property values in an impoverished area.
- This project will attract new development and housing in the area. The TRSD has a critical workforce housing need. This project will make possible new multi and single-family housing options that will benefit the area employers and residents.
- Currently many of the area septic and cesspools are discharging sewage and greywater onto surrounding land in an untreated state. The completion of the TRSD Wastewater Project will improve the area from an environmental standpoint and will result in the elimination of untreated sewer discharge into the community.
- In addition to direct improvements within the boundaries of the District, this project will improve the surrounding communities including the Town of Miami, the City of Globe, and Gila County. By improving the quality of life and economy within the District, this project will directly and indirectly improve the quality of life for all of the residents of the surrounding area by improving the environment, creating new job opportunities, improving area housing, and spurring additional economic development.

Your time and consideration are greatly appreciated.

Sincerely,

Tim R. Humphrey
District 2 Gila County Supervisor



150 North Pine Street, Globe, Arizona, 85502

November 8, 2023

Robert B Jacques
Board President
Tri-City Regional Sanitary District
PO Box 2198
Claypool, AZ 85532

Dear Mr. Jacques

The purpose of this letter is to express our continued support for the Tri-City Regional Sanitary District's (TRSD) efforts to develop modern sewer infrastructure and deliver high quality, yet affordable sewer services to the unincorporated areas of southern Gila County.

Specifically, as Mayor of the City of Globe we wish to express our support for the newly acquired wastewater treatment plant site and have no objections to the requested revision of the current Central Arizona Governments (CAG) Section 208 Water Quality Management Plan (WQMP) to include the new location outside the City of Globe. The City of Globe also has no objections to amending the current Designated Management Area (DMA) boundary to include the new WRF-site.

In order to maintain due diligence i will add the City of Globe reserves the right to modify it's decision, if warranted later in the process should additional information becomes available that would cause such a change in position.

The City of Globe City Council looks forward to the development of our future partnerships as your USDA funded infrastructure project advances.

Sincerely,

A handwritten signature in black ink, appearing to read "Al Gameros". The signature is stylized with a large, sweeping initial letter.

Al Gameros
Mayor



TOWN COUNCIL

Jose "Angel" Medina, Mayor
Dan Moat, Vice-Mayor
Michael Black
Sammy Gonzales
Robert Licano
Don Reiman
Michael Sosh Sr.

TOWN OF MIAMI
"Copper Center of the World"

500 W. Sullivan St.
Miami, AZ 85539
928-473-4403
www.miamiaz.gov

ADMINISTRATION

Alexis Rivera
Town Manager

Karen Norris
Town Clerk

February 9, 2024

VIA E-MAIL

Robert B. Jacques, Board President
Tri City Regional Sanitary District
P.O. Box 2198
Claypool, Arizona 85532-2198
robertbjacques@gmail.com

RE: TRSD CAG 208 Plan Amendment Revision

Dear Mr. Jacques,

The Town of Miami's Council has, for many years, and will continue to support the reasoned and economical transition of the region's septic and cesspool collection systems, both within and outside the Town's municipal boundaries, as the Town truly views its unincorporated neighbors as family and friends. The Town recognizes that the Tri City Regional Sanitary District ("TRSD"), which was formed by the combination of two previous sanitary districts, is an independent body charged with the wastewater service of many of those family and friends within the unincorporated parts of the southern Gila County region lying between the Town and City of Globe. It is clear, that both the Town and TRSD recognize the importance of the installation of new sewer collection lines within this unsupported region in order to facilitate the transition from the environmentally deficient septic and cesspool systems.

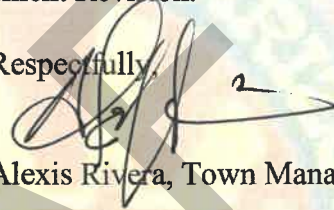
The Town of Miami's Council has met various times over the past few months to discuss and consider the Town's position regarding the TRSD CAG 208 Plan Amendment Revision. As has been discussed during the meetings between the Town and TRSD over the past couple of months, those discussions and deliberations have touched on the following issues and concerns:

1. The Town has concerns about the financial viability of the business plan outlined by TRSD and its effect on TRSD constituents. However, the Town recognizes and considers this to be an issue within the exclusive purview of TRSD and its constituents and, therefore, not an issue for objection by the Town.
2. The Town supports the concepts of the technical plan currently proposed for the construction of the collection system and processing plant based on information provided by TRSD.

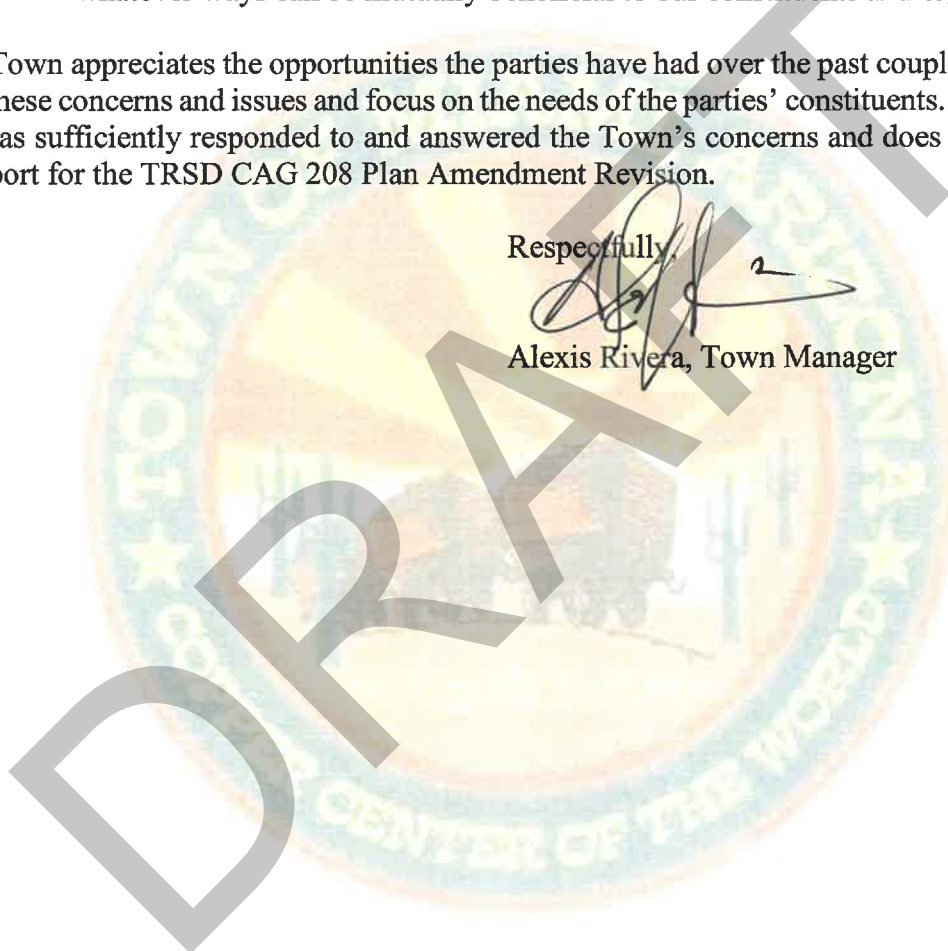
3. The Town has concerns regarding the issue of intersecting or crossing sewer lines. However, the Town recognizes this may be an issue that will need to be addressed in the future at the time of design and construction of the proposed collection system and would not be a basis for objection by the Town at this time. The Town remains optimistic that the Town and TRSD will be able to amicably work through any issues that may arise in the future concerning intersecting line.
4. The Town earnestly hopes TRSD can achieve its financial funding goals and proceed to the timely and efficient completion of the 208 Project Plan as amended. As previously stated, in the event this does not occur or issues arise during the construction of the proposed collection system, the Town again will continue to offer to support TRSD in whatever ways can be mutually beneficial to our constituents and organizations.

The Town appreciates the opportunities the parties have had over the past couple of months to meet and discuss these concerns and issues and focus on the needs of the parties' constituents. The Town believes that TRSD has sufficiently responded to and answered the Town's concerns and does hereby provide this letter of support for the TRSD CAG 208 Plan Amendment Revision.

Respectfully,



Alexis Rivera, Town Manager



Appendix D

TRSD Formation & Legal Description

DRAFT

315261

BOOKET 255 PAGE 76

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Louise G. Hochengatter.

Date Feb. 25, 1969 Time 3:30 P. M. Docket 255 Official Record Page 76
Records of Gila County, Arizona.

WITNESS my hand and official seal the day and year first above written.

DORIS MARRIN, County Recorder

By [Signature] Recorder.

FORMAL ORDER ESTABLISHING

COBRE VALLEY SANITARY DISTRICT

The petitions for the establishment of a Sanitary District in the Central Heights and Country Club Manor area came on regularly for hearing before the Board of Supervisors of Gila County, Arizona, in the Court House in Globe, Arizona, on the 3rd day of February, 1969, at the hour of 11:00 o'clock A. M. The Board, after due consideration of all objections made by certain residents of the area, now finds that the petition was duly signed by the required number of owners of real property of the proposed district; that the proposed work is necessary and that the public health, comfort, convenience, necessity and welfare will be promoted by establishment of the district set forth in the petition,

IT IS HEREBY ORDERED AND DECLARED:

That a Sanitary District, be, and the same is hereby formed and organized, and that the name of the district shall be known as COBRE VALLEY SANITARY DISTRICT; that the boundaries are as follows:

Beginning at the South $\frac{1}{4}$ -corner of Sec. 22, T. 1 N., R. 15 E., G&SRM., said point also being the SW Cor. Central Heights, Map No. 52, Gila County Records; thence easterly 1,325.7 feet along the south boundary of Sec. 22 and of Central Heights to the SE Cor. Central Heights; thence northerly along the east boundary of Central Heights 609.44 feet to the south end of the west line of Central Heights Addition to Central Heights Townsite, Map No. 69, G. C. R.; thence following the boundary of said Central Heights Addition northeasterly 6.67 feet, southeasterly 150 feet; northeasterly 150 feet, southeasterly 450 feet, and northeasterly 100 feet to the east corner of Lot 11, Block 7, Central Heights Addition, said east corner also being the northwesterly end of the southwesterly sideline of Central Ave. of Doc. Butler Estates, Map No. 123, G. C. R.; thence following the

boundary of Doc Butler Estates southeasterly 400 feet, northeasterly 160 feet, and southeasterly 370.70 feet to the east line of Section 22, T. 1 N., R. 15 E., G&SRM., and the southernmost point on the east line of Doc Butler Estates; thence northerly along the east line of said Sec. 22 and the east line of Doc Butler Estates 501.71 feet to the north end of the east line of Block No. 3, Doc Butler Estates; thence following the boundary of Doc Butler Estates northwesterly 388.78 feet, northeasterly 150 feet, and northwesterly 850 feet to the northernmost corner of Lot 1, Block No. 1, Doc Butler Estates; thence N. 40°36' E. along the southeasterly boundary of Block 2 Central Heights Addition to Central Heights Townsite, Map No. 69, C. C. R., a distance of 135 feet; thence N. 49°24' W. along the northeasterly sideline of Apache Avenue of said Central Heights Addition a distance of 45 feet, more or less, to the intersection of said northeasterly sideline of Apache Avenue with the southward prolongation of the east boundary of Central Heights School property as described in Dkt. 82, Pg. 322, C. C. R.; thence northerly along said southward prolongation and along the east boundary of Central Heights School property a distance of 625 feet, more or less, to the NE corner of Central Heights School property; thence northerly parallel to the east line of Globe Heights, Map No. 81, C. C. R., 390 feet, more or less to a point 375 feet, measured at right angles, from the near right-of-way line of North Main Street; thence N. 49° E., more or less, parallel to said right-of-way line 285 feet; more or less, to a point on the southeasterly extension of the southwesterly right-of-way line of Hengehold Avenue of Anaheim Subdivision, Map No. 65, C. C. R.; thence northwesterly along said extension 375 feet to the near right-of-way line of North Main Street; thence northeasterly along said right-of-way line 150 feet, more or less, to a point on the northerly prolongation of the east line of the Central Heights School property previously referred to; thence northerly along said prolongation 960 feet, more or less, to the south right-of-way line of U. S. Highway 60-70; thence westerly along the south right-of-way line of U. S. Highway 60-70 a distance of 1250 feet, more or less, to a point 600 feet east of and measured at right angles to the west boundary of NE 1/4 Sec. 22; thence southerly parallel to said west boundary of NE 1/4 Sec. 22 a distance of 1275 feet, more or less, to a point 150 feet north of and measured at right angles to the south boundary of NE 1/4 Sec. 22; thence westerly parallel to the south boundary of NE 1/4 Sec. 22 a distance of 600 feet, more or less, to the west boundary of NE 1/4 Sec. 22 and the east boundary of Country Club Manor, Replatted, Map No. 89, C. C. R.; thence northerly along the west boundary of NE 1/4 Sec. 22 a distance of 1180 feet, more or less, to the south right-of-way line of U. S. Highway 60-70; thence

westerly along said south right-of-way line 1330 feet, more or less, to the west boundary E $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 22; thence southerly along said west boundary E $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 22 to the north right-of-way line of Paxton Avenue of Country Club Manor, Replatted, Map No. 89, G. C. R.; thence westerly, southwesterly, southerly, southeasterly, easterly, and southerly along the exterior boundary of Block 7, Country Club Manor, Replatted, to a point on the south boundary of Sec. 22, said point being the SW corner of Lot 1, Block 7, Country Club Manor, Replatted, and the NW Cor. of Country Club Manor Unit No. 2, Map No. 146, G. C. R.; thence southeasterly along the southwesterly boundary of Country Club Manor Unit No. 2 a distance of 525 feet, more or less, to the SW Cor. Lot 5, Block 16, Country Club Manor Unit No. 2; thence southerly to the northwest corner of that property described in Dkt. 134, Pg. 266, G. C. R.; thence south 451.5 feet; thence N. 73° 35' E. along the southeasterly boundary of said property described in Dkt. 134, Pg. 266, G. C. R., 576 feet; thence southerly parallel to the west boundary of Central Heights, Map No. 52, G. C. R., a distance of 525 feet; thence southwesterly parallel to English Ave. in SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22 a distance of 530 feet; thence southerly parallel to the west boundary of Central Heights 400 feet, more or less; thence easterly parallel to the south boundary of SW $\frac{1}{4}$ Sec. 22 a distance of 580 feet to the east boundary of SW $\frac{1}{4}$ Sec. 22 and the west boundary of Central Heights, said point also being the NW Cor. Lot 19, Block 26, Central Heights; thence southerly along the west boundary of Central Heights 335.3 feet to the SW Cor. of Central Heights, which point is also the S. $\frac{1}{2}$ -corner of Sec. 22 and the point of beginning.

Specifically excluded from the above-described Sanitary District is the Cemetery property, bounded on the north by the north boundary of the E $\frac{1}{2}$ Sec. 22; on the east and south by Central Heights, Map No. 52, G. C. R.; and on the west by Country Club Manor Unit No. 2, Map No. 146, G. C. R.

Dated this 3rd day of February, 1969.

BOARD OF SUPERVISORS OF GILA COUNTY,
ARIZONA

James W. H. Kaudy
Charlie Nichols
William C. Perkins

FORMAL ORDER ESTABLISHING

PINAL SANITARY DISTRICT

The Gila County Board of Supervisors having been petitioned to initiate proceedings for formation of a Sanitary District and establishment of boundaries of said Sanitary District, by the Board's Order on November 2, 1982, an election was held within the proposed boundaries of the Sanitary District so petitioned.

At their Meeting of November 3, 1982, the Gila County Board of Supervisors canvassed the Votes cast as said Special Election held to determine the desire of the prospective residents of such Sanitary District; and found that 438 Votes were cast for the establishment thereof, and 261 Votes were cast against such establishment.

The Board finding said Election was properly held and that it carried successfully; that the proposed work is necessary; and that the public health, comfort, convenience, necessity, and welfare will be promoted by establishment of said Sanitary District;

IT IS HEREBY ORDERED AND DECLARED:

That a Sanitary District be, and the same is hereby, formed and organized, and that the name of the Sanitary District shall be known as PINAL SANITARY DISTRICT; and the boundaries of said Pinal Sanitary District are as follows:

Beginning at the Southwest Corner of Section 29; thence along the west line of Section 29 to the Northwest Corner of Section 29; thence in a northwesterly direction to the East $\frac{1}{4}$ Corner of Section 20; thence northwesterly to the North $\frac{1}{4}$ Corner of Section 21; thence north along the $\frac{1}{4}$ section line of Section 16 to the North $\frac{1}{4}$ Corner of Section 16; thence east along north section line of Sections 16 and 15 to the North $\frac{1}{4}$ Corner of Section 15; thence south along the $\frac{1}{4}$ section line to the Center of Section 15; thence east along the $\frac{1}{4}$ section line to the East $\frac{1}{4}$ corner of Section 15; thence south along the section lines of Sections 15, 22, and 27 to the Southeast Corner of Section 27; thence west along the south line of Section 27 to the Southwest Corner of Section 27; thence north along the west line of Section 27 to the West $\frac{1}{4}$ Corner of Section 27; thence westerly along the $\frac{1}{4}$ section line to the Center of Section 28; thence southwesterly to the Southwest Corner of Section 29, and the true Point of Beginning. All above being in Township 1 North, Range 15 East.

Specifically excluded from the above described Sanitary District is that area comprising Cobre Valley Sanitary District as Recorded in Docket 255, pages 76, 77, and

Formal Order Establishing
Pinal Sanitary District

78 in the Gila County Recorder's Office, and any subsequent annexations to said Cobre Valley Sanitary District; and

That area known as the Pioneer Hills Subdivision, as set forth in Maps Nos. 519, 195A, and 519C in the Gila County Recorder's Office.

DATED at Globe, Arizona, this 22nd Day of November, 1982.

GILA COUNTY BOARD OF SUPERVISORS

Robert P. Basillas
Chairman

Adolph B. Suijillo
Vice-Chairman

James H. Jones
Member

ATTEST:

Rosa Marie Phillips
Clerk

The Clerk
31441
C

490169

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Gila County Board of Supervisors

Date Dec. 7, 1982 Time 2:30 P. M. Docket 576 Office's Records Page 8 275 & 276

Records of Gila County, Arizona
WITNESS my hand and official seal the day and year first above written.

INDEXED
FILED

MARY V. DE PAOLI, County Recorder
By Celia S. Campos Deputy.

315261

BOOKET 255 PAGE 76

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Louise G. Rehengatter.

Date Feb. 25, 1969 Time 3:30 P. M. Docket 255 Official Record Page 76
Records of Gila County, Arizona.

WITNESS my hand and official seal the day and year first above written.

DORIS MARRIN, County Recorder

By [Signature] Recorder.

FORMAL ORDER ESTABLISHING

COBRE VALLEY SANITARY DISTRICT

The petitions for the establishment of a Sanitary District in the Central Heights and Country Club Manor area came on regularly for hearing before the Board of Supervisors of Gila County, Arizona, in the Court House in Globe, Arizona, on the 3rd day of February, 1969, at the hour of 11:00 o'clock A. M. The Board, after due consideration of all objections made by certain residents of the area, now finds that the petition was duly signed by the required number of owners of real property of the proposed district; that the proposed work is necessary and that the public health, comfort, convenience, necessity and welfare will be promoted by establishment of the district set forth in the petition,

IT IS HEREBY ORDERED AND DECLARED:

That a Sanitary District, be, and the same is hereby formed and organized, and that the name of the district shall be known as COBRE VALLEY SANITARY DISTRICT; that the boundaries are as follows:

Beginning at the South $\frac{1}{4}$ -corner of Sec. 22, T. 1 N., R. 15 E., G&SRM., said point also being the SW Cor. Central Heights, Map No. 52, Gila County Records; thence easterly 1,325.7 feet along the south boundary of Sec. 22 and of Central Heights to the SE Cor. Central Heights; thence northerly along the east boundary of Central Heights 609.44 feet to the south end of the west line of Central Heights Addition to Central Heights Townsite, Map No. 69, G. C. R.; thence following the boundary of said Central Heights Addition northeasterly 6.67 feet, southeasterly 150 feet; northeasterly 150 feet, southeasterly 450 feet, and northeasterly 100 feet to the east corner of Lot 11, Block 7, Central Heights Addition, said east corner also being the northwesterly end of the southwesterly sideline of Central Ave. of Doc. Butler Estates, Map No. 123, G. C. R.; thence following the

boundary of Doc Butler Estates southeasterly 400 feet, northeasterly 160 feet, and southeasterly 370.70 feet to the east line of Section 22, T. 1 N., R. 15 E., G&SRM., and the southernmost point on the east line of Doc Butler Estates; thence northerly along the east line of said Sec. 22 and the east line of Doc Butler Estates 501.71 feet to the north end of the east line of Block No. 3, Doc Butler Estates; thence following the boundary of Doc Butler Estates northwesterly 388.78 feet, northeasterly 150 feet, and northwesterly 850 feet to the northernmost corner of Lot 1, Block No. 1, Doc Butler Estates; thence N. 40°36' E. along the southeasterly boundary of Block 2 Central Heights Addition to Central Heights Townsite, Map No. 69, C. C. R., a distance of 135 feet; thence N. 49°24' W. along the northeasterly sideline of Apache Avenue of said Central Heights Addition a distance of 45 feet, more or less, to the intersection of said northeasterly sideline of Apache Avenue with the southward prolongation of the east boundary of Central Heights School property as described in Dkt. 82, Pg. 322, C. C. R.; thence northerly along said southward prolongation and along the east boundary of Central Heights School property a distance of 625 feet, more or less, to the NE corner of Central Heights School property; thence northerly parallel to the east line of Globe Heights, Map No. 81, C. C. R., 390 feet, more or less to a point 375 feet, measured at right angles, from the near right-of-way line of North Main Street; thence N. 49° E., more or less, parallel to said right-of-way line 285 feet; more or less, to a point on the southeasterly extension of the southwesterly right-of-way line of Hengehold Avenue of Anaheim Subdivision, Map No. 65, C. C. R.; thence northwesterly along said extension 375 feet to the near right-of-way line of North Main Street; thence northeasterly along said right-of-way line 150 feet, more or less, to a point on the northerly prolongation of the east line of the Central Heights School property previously referred to; thence northerly along said prolongation 960 feet, more or less, to the south right-of-way line of U. S. Highway 60-70; thence westerly along the south right-of-way line of U. S. Highway 60-70 a distance of 1250 feet, more or less, to a point 600 feet east of and measured at right angles to the west boundary of NE 1/4 Sec. 22; thence southerly parallel to said west boundary of NE 1/4 Sec. 22 a distance of 1275 feet, more or less, to a point 150 feet north of and measured at right angles to the south boundary of NE 1/4 Sec. 22; thence westerly parallel to the south boundary of NE 1/4 Sec. 22 a distance of 600 feet, more or less, to the west boundary of NE 1/4 Sec. 22 and the east boundary of Country Club Manor, Replatted, Map No. 89, C. C. R.; thence northerly along the west boundary of NE 1/4 Sec. 22 a distance of 1180 feet, more or less, to the south right-of-way line of U. S. Highway 60-70; thence

westerly along said south right-of-way line 1330 feet, more or less, to the west boundary E $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 22; thence southerly along said west boundary E $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 22 to the north right-of-way line of Paxton Avenue of Country Club Manor, Replatted, Map No. 89, G. C. R.; thence westerly, southwesterly, southerly, southeasterly, easterly, and southerly along the exterior boundary of Block 7, Country Club Manor, Replatted, to a point on the south boundary of Sec. 22, said point being the SW corner of Lot 1, Block 7, Country Club Manor, Replatted, and the NW Cor. of Country Club Manor Unit No. 2, Map No. 146, G. C. R.; thence southeasterly along the southwesterly boundary of Country Club Manor Unit No. 2 a distance of 525 feet, more or less, to the SW Cor. Lot 5, Block 16, Country Club Manor Unit No. 2; thence southerly to the northwest corner of that property described in Dkt. 134, Pg. 266, G. C. R.; thence south 451.5 feet; thence N. 73° 35' E. along the southeasterly boundary of said property described in Dkt. 134, Pg. 266, G. C. R., 576 feet; thence southerly parallel to the west boundary of Central Heights, Map No. 52, G. C. R., a distance of 525 feet; thence southwesterly parallel to English Ave. in SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22 a distance of 530 feet; thence southerly parallel to the west boundary of Central Heights 400 feet, more or less; thence easterly parallel to the south boundary of SW $\frac{1}{4}$ Sec. 22 a distance of 580 feet to the east boundary of SW $\frac{1}{4}$ Sec. 22 and the west boundary of Central Heights, said point also being the NW Cor. Lot 19, Block 26, Central Heights; thence southerly along the west boundary of Central Heights 335.3 feet to the SW Cor. of Central Heights, which point is also the S. $\frac{1}{2}$ -corner of Sec. 22 and the point of beginning.

Specifically excluded from the above-described Sanitary District is the Cemetery property, bounded on the north by the north boundary of the E $\frac{1}{2}$ Sec. 22; on the east and south by Central Heights, Map No. 52, G. C. R.; and on the west by Country Club Manor Unit No. 2, Map No. 146, G. C. R.

Dated this 3rd day of February, 1969.

BOARD OF SUPERVISORS OF GILA COUNTY,
ARIZONA

James W. H. Kaudy
Charlie Nichols
William C. Perkins

RESOLUTION NO. 001

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRI-CITY REGIONAL SANITARY DISTRICT DECLARING THAT THE PINAL SANITARY DISTRICT AND THE COBRE VALLEY SANITARY DISTRICT, GILA COUNTY, STATE OF ARIZONA ARE MERGED PURSUANT TO ARIZONA REVISED STATUTES §48-2001.01(G).

RECITALS:

WHEREAS, the Pinal Sanitary District, Gila County, was an Arizona Sanitary District formed and operating under the laws of the State of Arizona as set forth in Arizona Revised Statutes ("ARS") §48-2001 et seq.; and,

WHEREAS, the Cobre Valley Sanitary District, Gila County, was an Arizona Sanitary District formed and operating under the laws of the State of Arizona as set forth in Arizona Revised Statutes ("ARS") §48-2001 et seq.; and,

WHEREAS, pursuant to ARS §48-2001.01(A)(2), the board of directors of each of the respective sanitary districts did by a two-thirds vote adopt a resolution requesting that the merger of the districts take place; and,

WHEREAS, pursuant to ARS §48-2001.01(D), the Gila County Board of Supervisors after a public hearing determined that the merger of the Pinal Sanitary District and the Cobre Valley Sanitary District would serve the public convenience, welfare or necessity and called for an election concerning the proposed merger of the districts on May 17, 2011; and,

WHEREAS, the majority of the votes cast in the merger election held on May 17, 2011 were in favor of the merger of the two districts; that pursuant to ARS §48-2001.01(F) the Gila County Board of Supervisors did meet and canvass the returns and determined that the majority of the votes cast at the election held on May 17, 2011 in each of the two districts was in favor of merging the sanitary districts; and that the Board of Supervisors entered that fact in the minutes; and,

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Pinal Sanitary District as follows:

THAT pursuant to ARS §48-2001.01(G), the Pinal Sanitary District and the Cobre Valley Sanitary District are hereby merged to become a new Arizona Sanitary District, the Tri-City Regional Sanitary District, Gila County, State of Arizona, and each of the prior districts are hereby joined into the Tri-City Regional Sanitary District.

THAT pursuant to ARS §48-2001.01(G), the Tri-City Regional Sanitary District will be administered by the new Board consisting of five (5) members formed by appointment from the existing members of the boards of directors of the two districts, namely Robert J. Zache, Mary Anne Moreno, Kevin Kenney, Mitch Malkovich and Richard Dixon with Robert J. Zache serving as President and Mary Anne Moreno serving as Secretary.

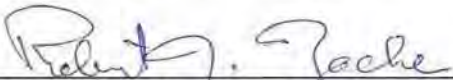
THAT the officers of Tri-City Regional Sanitary District are hereby authorized to establish a new bank account for the District and to execute such forms as are required by the banking institution and that the funds maintained in the bank accounts of the Pinal Sanitary District and the Cobre Valley Sanitary District are to be placed in said new account as soon as is practicable.

THAT the officers of the District and the attorney for the District are hereby authorized to take all necessary steps to complete the merger of the districts.

THAT pursuant to ARS §48-2001.01(G), this Resolution including the names of the members of the Board of Directors is to be sent to the Gila County Board of Supervisors.


THAT pursuant to ARS §48-2001.01(G), a certified copy of this Resolution and the legal description of the Tri-City Regional Sanitary District are to be recorded at the office of the Gila County Recorder.

PASSED AND ADOPTED this 20th day of June, 2011 by a majority vote of the Board of Directors of the Tri-City Regional Sanitary District, Gila County, State of Arizona.



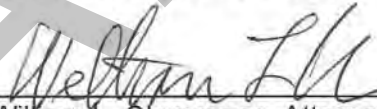
Robert J. Zache, President

ATTEST:



Mary Anne Moreno, Secretary


APPROVED AS TO FORM:



William L. Clemmens, Attorney

CERTIFICATION

I, Mary Anne Moreno, the duly appointed and acting Secretary of the Board of Directors of the Tri-City Regional Sanitary District of Gila County, Arizona, do hereby certify that the above and foregoing Resolution No. 001 was duly passed and adopted by the Board of Directors at a meeting held on June 20, 2011 and the vote was 05 aye's, 0 nay's, 0 abstained, 0 were absent and 05 Board Members were present at such meeting.



Mary Anne Moreno, Secretary

Boundary Description Tri-City Regional Sanitary District

A tract of land being portions of Sections 15, 16, 20, 21, 22, 27, 28 and 29, in Township 1 North, Range 15 East of the Gila and Salt River Meridian, in Gila County, Arizona, more particularly described as follows:

Beginning at the Southwest Corner of said Section 29;
Thence northerly along the west line of said Section 29 to the Northwest Corner of said Section 29;
Thence northeasterly to the East Quarter Corner of said section 20;
Thence northeasterly to the North Quarter Corner of said Section 21;
Thence northerly along the north-south mid-section line of said Section 16 to the North Quarter Corner of said Section 16;
Thence Easterly along the north lines of said Section 16 and Section 15 to the North Quarter Corner of said Section 15;
Thence southerly along the north-south mid-section line of said Section 15 to the Center Quarter Corner of said Section 15;
Thence easterly along the east-west mid-section line of said Section 15 to the East Quarter Corner of said Section 15;
Thence southerly along the east lines of said Section 15, Section 22 and Section 27 to the Southeast Corner of said Section 27;
Thence westerly along the south line of said Section 27 to the Southwest Corner of said Section 27;
Thence northerly along the west line of said Section 27 to the West Quarter Corner of said Section 27;
Thence westerly along the east-west mid-section line of said Section 28 to the Center Quarter Corner of said Section 28;
Thence southwesterly to the Southwest Corner of said Section 29 and the Point of Beginning.

Except any portion of the above-described tract of land within the plat of Pioneer Hills Subdivision, recorded in Map Numbers 519, 519A and 519B, in the records of Gila County, Arizona.

Also except any portion of the above-described tract of land within the plat of Chaparral Estates, recorded as Map Number 455, in the records of Gila County, Arizona.

Also except and portion of the above-described tract of land within the plat of Country Club Annex, recorded as Map Numbers 615 and 615A in the records of Gila County, Arizona.

Also except any portion of the above-described tract of land within the plat of County Club Annex Unit 1, recorded as Map Numbers 688, 688A, 695 and 695A in the records of Gila County, Arizona.

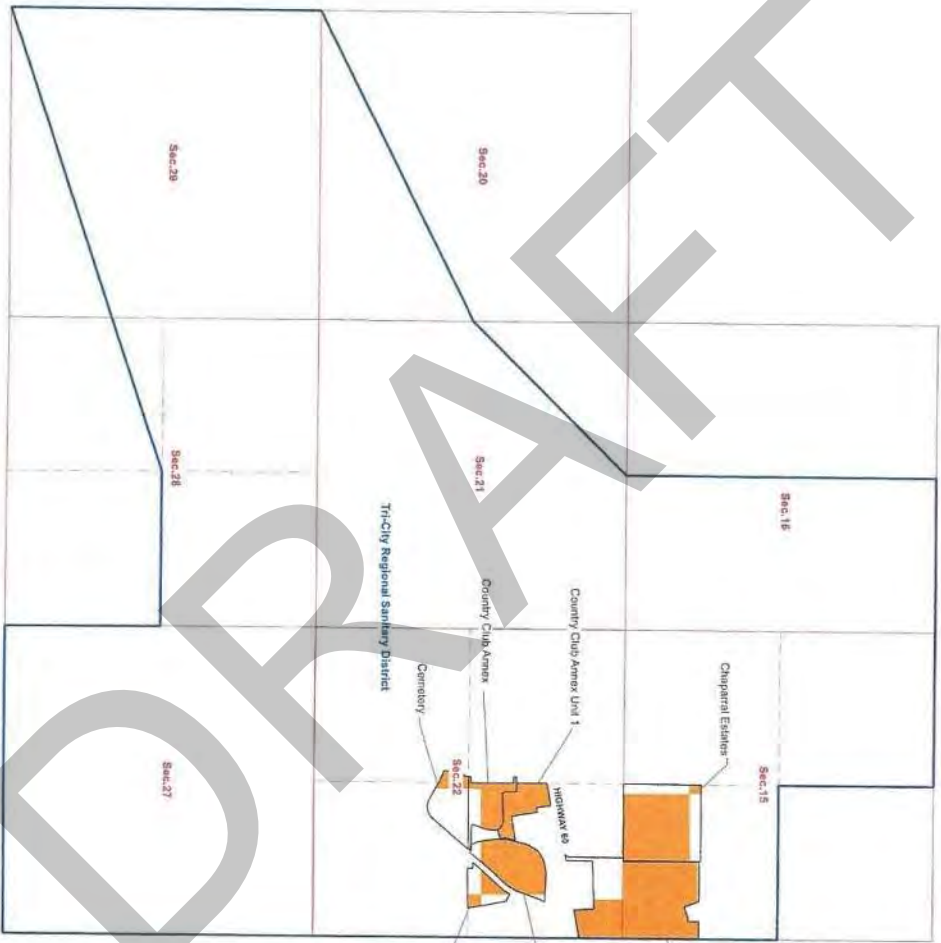
Also except any portion of the above-described tract of land within Parcel No. 1 and also except any portion of the above-described tract of land within Parcel No. 2 as described in Document Number 2006-010079 in the records of Gila County, Arizona.

Also except any portion of the above-described property within the cemetery tract, more particularly described as follows: bounded on the north by the north line of the south half of said Section 22; bounded on the east and south by the plat of Central Heights, recorded as Map Number 52 in the records of Gila County, Arizona; bounded on the west by the plat of Country Club Manor Unit 2, recorded as Map Number 146 in the records of Gila County, Arizona.



DRAFT

NOTES
 1) PROPORTIONS ARE NOT TO SCALE. RECORDS LAND IS REPRESENTED BY A DOTTED LINE.
 2) CALCULATED AREA INCLUDING OR EXCLUDING RECORDS LAND IS NOT TO BE USED FOR ANY PURPOSES.



LEGEND

	OWNERS PROPERTY
	RECORDS LAND BOUNDARY
	PUBLIC LAND BOUNDARY
	TRICITY REGIONAL SANITARY DISTRICT BOUNDARY

MAP OF BOUNDARY
 OF THE
 TRICITY REGIONAL SANITARY DISTRICT
 IN T.T.N., R.15E., G.33R.M.
 GILA COUNTY, ARIZONA

SCALE: 1"=150' DATE: 4/30/2018





When Recorded, Mail to:

William L. Clemmens

Law Offices of William L. Clemmens

416 W Sullivan St

Miami AZ 85539-1212



Caption Heading/Title: Resolution 18-001

Do Not Remove This Sheet, It Is Part Of The Recorded Document



RESOLUTION NO. 18-001

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRI-CITY REGIONAL SANITARY DISTRICT, GILA COUNTY, STATE OF ARIZONA ADOPTING AND APPROVING THE OFFICIAL BOUNDARY FOR THE TRI-CITY REGIONAL SANITARY DISTRICT OF GILA COUNTY, ARIZONA.

RECITALS:

WHEREAS, the Tri-City Regional Sanitary District ("TRSD"), Gila County, is an Arizona Sanitary District formed and operating under the laws of the State of Arizona as set forth in Arizona Revised Statutes ("ARS") §48-2001 et seq. and formed by the merger of the Pinal Sanitary District and the Cobre Valley Sanitary District by an election held on May 17, 2011; and approval by the Gila County Board of Supervisors; and,

WHEREAS, the legal description for the boundary of the TRSD and map were prepared at the time of the merger; and,

WHEREAS, Staff of Gila County have raised questions about the legal boundary of TRSD because the legal description of the boundary was never recorded with the Gila County Recorder; and,

WHEREAS, it is the desire of the Board of Directors of TRSD to resolve all issues regarding the TRSD boundary.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the TRSD as follows:

THAT, the legal description and map attached hereto are hereby adopted as the official description of the TRSD boundary; and,

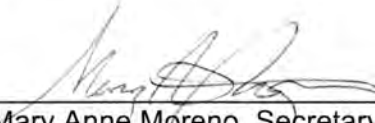
THAT, TRSD staff is directed to record the legal description of the boundary with the Gila County Recorder.

PASSED AND ADOPTED this 30th day of April, 2018 by the Board of Directors of the Tri-City Regional Sanitary District, Gila County, State of Arizona.

ATTEST:



Robert J. Zache, President



Mary Anne Moreno, Secretary

CERTIFICATION

I, Mary Anne Moreno, the duly appointed Secretary of the Board of Directors of the Tri-City Regional Sanitary District of Gila County, Arizona, do hereby certify that the above and foregoing Resolution No. 18-001 was duly passed and adopted by the Board of Directors at a meeting held on April 30, 2018 and the vote was 3 aye's, 0 nay's 0 abstained, 2 were absent, and 3 Board Members were present at such meeting.



Mary Anne Moreno, Secretary



Boundary Description Tri-City Regional Sanitary District

A tract of land being portions of Sections 15, 16, 20, 21, 22, 27, 28 and 29, in Township 1 North, Range 15 East of the Gila and Salt River Meridian, in Gila County, Arizona, more particularly described as follows:

Beginning at the Southwest Corner of said Section 29;
Thence northerly along the west line of said Section 29 to the Northwest Corner of said Section 29;
Thence northeasterly to the East Quarter Corner of said section 20;
Thence northeasterly to the North Quarter Corner of said Section 21;
Thence northerly along the north-south mid-section line of said Section 16 to the North Quarter Corner of said Section 16;
Thence Easterly along the north lines of said Section 16 and Section 15 to the North Quarter Corner of said Section 15;
Thence southerly along the north-south mid-section line of said Section 15 to the Center Quarter Corner of said Section 15;
Thence easterly along the east-west mid-section line of said Section 15 to the East Quarter Corner of said Section 15;
Thence southerly along the east lines of said Section 15, Section 22 and Section 27 to the Southeast Corner of said Section 27;
Thence westerly along the south line of said Section 27 to the Southwest Corner of said Section 27;
Thence northerly along the west line of said Section 27 to the West Quarter Corner of said Section 27;
Thence westerly along the east-west mid-section line of said Section 28 to the Center Quarter Corner of said Section 28;
Thence southwesterly to the Southwest Corner of said Section 29 and the Point of Beginning.

Except any portion of the above-described tract of land within the plat of Pioneer Hills Subdivision, recorded in Map Numbers 519, 519A and 519B, in the records of Gila County, Arizona.

Also except any portion of the above-described tract of land within the plat of Chaparral Estates, recorded as Map Number 455, in the records of Gila County, Arizona.

Also except and portion of the above-described tract of land within the plat of Country Club Annex, recorded as Map Numbers 615 and 615A in the records of Gila County, Arizona.

Also except any portion of the above-described tract of land within the plat of County Club Annex Unit 1, recorded as Map Numbers 688, 688A, 695 and 695A in the records of Gila County, Arizona.

Also except any portion of the above-described tract of land within Parcel No. 1 and also except any portion of the above-described tract of land within Parcel No. 2 as described in Document Number 2006-010079 in the records of Gila County, Arizona.



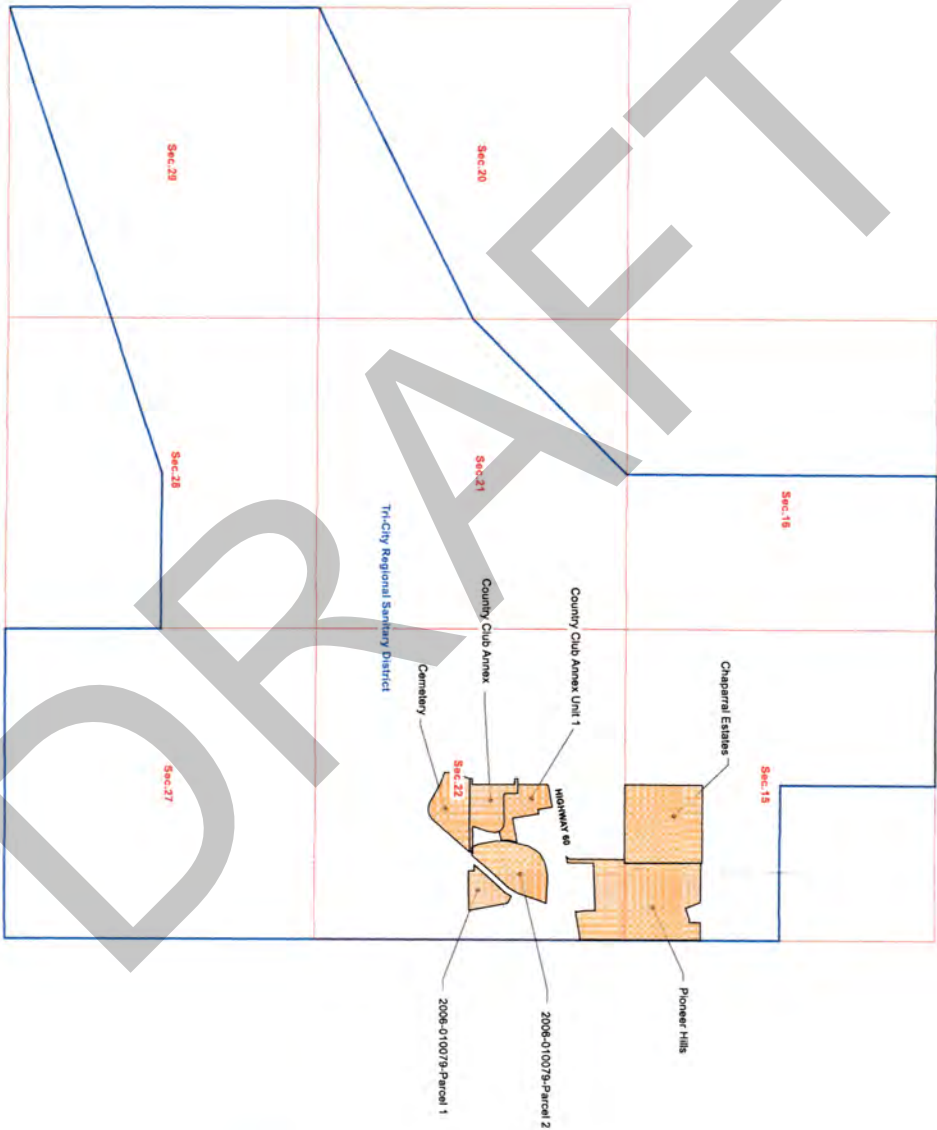
Also except any portion of the above-described property within the cemetery tract, more particularly described as follows: bounded on the north by the north line of the south half of said Section 22; bounded on the east and south by the plat of Central Heights, recorded as Map Number 52 in the records of Gila County, Arizona; bounded on the west by the plat of Country Club Manor Unit 2, recorded as Map Number 146 in the records of Gila County, Arizona.



DRAFT



PLEASE PRINTED FROM RECORDS AND REPRODUCTIONS
 FROM RECORDS OF PLAT AND FIELD SURVEY MAPS



LEGEND	
[Blue line]	TRI-CITY REGIONAL SANITARY DISTRICT BOUNDARY
[Red line]	PARCEL BOUNDARY
[Orange hatched area]	EXCLUDED AREAS



MAP OF BOUNDARY
 OF THE
 TRI-CITY REGIONAL SANITARY DISTRICT
 IN T1N, R15E, Q4S, R1M
 GILA COUNTY, ARIZONA

SCALE: 1:600' PLAN DATE: 4/30/2018



AAK & LK, Inc.
 Surveyors
 Gila, AZ 85003
 (928) 425-8000

PROJECT NO. 18P

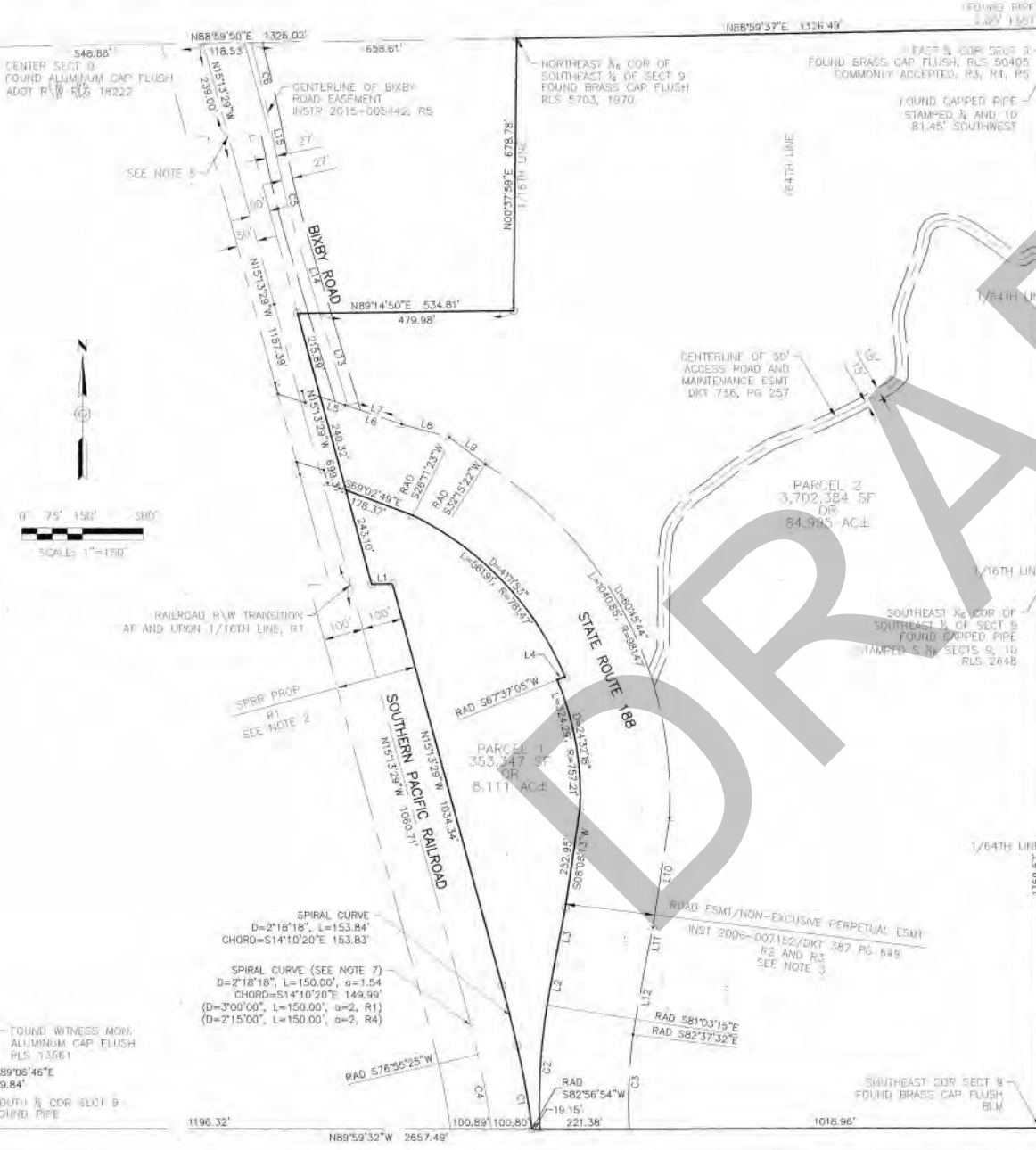
RECORD OF SURVEY - MINOR LAND DIVISION

A PART OF THAT PROPERTY DESCRIBED IN BOOK 17, PAGE 162 AND BOOK 17, PAGE 219 OF REAL ESTATE DEEDS, BEING PART OF THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 1 NORTH, RANGE 15 EAST, OF THE GILA AND SALT RIVER MERIDIAN, GILA COUNTY, ARIZONA



State of Arizona, County of Gila
I hereby certify that the within instrument was filed and recorded at the request of
BHP Copper, Inc
Date **4/25/23** Time **10:26** M&P No. **5730**
Official Records of Gila County, AZ
Witness my hand and official seal
the day and year written above
Sadie Bingham
Gila County Recorder
By **[Signature]** Fee # **2023-063550**

APPROVED TO RECORD
The Survey and Plat Commission
of the State of Arizona
MLD 2023-04-11-23-267
[Signature]
Surveyor Registered in the State of Arizona



DESCRIPTION

THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 1 NORTH, RANGE 15 EAST, GILA AND SALT RIVER MERIDIAN, GILA COUNTY, ARIZONA.
EXCEPT THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 1 NORTH, RANGE 15 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, GILA COUNTY, ARIZONA.
AND EXCEPT THAT PARCEL TWO WEST OF THE SOUTHERN PACIFIC RAILROAD CENTERLINE WITHIN THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 1 NORTH, RANGE 15 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, GILA COUNTY, ARIZONA.
AND EXCEPT ANY PORTION OF THE SOUTHERN PACIFIC RAILROAD CURVE WITHIN THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 1 NORTH, RANGE 15 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, GILA COUNTY, ARIZONA.
AND EXCEPT ALL THE ORE THEREON AS RESERVED BY PATENT TO THE UNITED STATES OF AMERICA, RETURNED BOOK 2, PAGE 292 AND BOOK 11, PAGE 245, RECORDS OF GILA COUNTY, ARIZONA.

PARCEL INFORMATION

AREA: 704-112-1100 A.
BHP COPPER, INC
4,055,731 SF OR 93.107 AC±

CONTACT
JON BRYANT-BAKER
BHP COPPER LAND DEPARTMENT
318-470-8978
JON.BAKER@BHP.COM

REFERENCES

- R1-SOUTHERN PACIFIC RAILROAD MAP 704-4-12
- R2-ADOT SR 188 R/W MAP 3-214-703
- R3-ADOT SR 188 R/W MAP 3-188-A-BDD
- R4-RECORD OF SURVEY MINOR LAND DIVISION, PDS 3531, US 39196
- R5-RECORD OF SURVEY SHOWING BIXBY ROAD, ROS 4526, LS 33196

LEGEND

- SET NEBAR AND CAP, RLS #7537
- FOUND ALUMINUM CAP FLUSH, UNLESS OTHERWISE NOTED
- FOUND PIPE, UNLESS OTHERWISE NOTED
- FOUND ALUMINUM CAP FLUSH, ADOT R/W RLS 18222
- SECTION LINE
- MID-SECTION LINE
- 1/4 OR 1/8 SECTION LINE
- BOUNDARY LINE
- CENTERLINE
- EASEMENT

SURVEYOR'S NOTES

1. SURVEYED DURING THE MONTH OF MARCH 2023 AND COORDINATES WERE VERIFIED IN THE FIELD USING REAL TIME KINEMATIC GPS OBSERVATIONS RELATIVE TO PUBLISHED CONTROL POINTS.
2. LEGAL DESCRIPTION PROVIDED IN PIONEER TITLE AGENCY REPORT OF TITLE #R040472, DATED FEBRUARY 15, 2023.
3. STATE ROUTE 188 IN PLACE PER AN NON-EXCLUSIVE PERPETUAL EASEMENT (ADOT/ET 587 PAGE 645) FOR A 1974 REALIGNMENT AT MIAMI WASH AND ROADWAY EASEMENT (INSTRUMENT 2006-007692) FOR 2006 WIDENING AND GULCH RESTORATION. ADOT RIGHT OF WAY PLANS (R2 AND R3) ARE PICTORIAL REPRESENTATIONS OF NOTED DOCUMENTS AND SHOW THAT THE ROADWAY EASEMENT ACROSS THIS PROPERTY IS INDEPENDENT OF ROADWAY AND CONSTRUCTION CENTERLINES.
4. RAILROAD RIGHT OF WAY LIMITS DETERMINED BY OBSERVATION OF RAILROAD CENTERLINE AS VERIFIED BY INTERPRETATION OF RAILROAD MAP (R1), RECORD OF SURVEY 3531 (R4) AND RECORD OF SURVEY 4526 (R5).
5. INFERRED FROM RAILROAD MAP (R1) THAT RAILROAD RIGHT OF WAY TRANSITION IS PARALLEL TO, AND 239.00' SOUTHEAST OF, THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 9, ALONG THE CENTERLINE OF RAILROAD.
6. PARCEL IS ZONED TR-02T, EXCEPT BETWEEN THE EAST LINE OF SR 188 EASEMENT AND A LINE 400 FEET EAST OF, AND OFFSET FROM, THE EAST STATE ROUTE 188 EASEMENT LINE, WHERE THE ZONING CHANGES TO C3.
7. RAILROAD MAP (R1) SPIRAL CURVE HAS A CALCULATED $a=2$, AND ROD 3531 (R4) STATES THAT $a=2$ BUT IF THE CALCULATED DELTA AND SPIRAL LENGTH ON ROS 3531 ARE HELD, a WOULD CALCULATE TO 1.5. SPIRAL CURVE LENGTH FROM R1 AND R4 WAS HELD.
8. PROPERTY IS VACANT.
9. BOTH PARCEL 1 AND PARCEL 2 CAN BE ACCESSED FROM STATE ROUTE 188, WHICH IS TRAVERSABLE BY A 2-WHEEL DRIVE PASSENGER MOTOR VEHICLE.
10. SURVEY REQUESTED BY MIKE KRESS OF PACE ENGINEERING ON BEHALF OF TRI CITY REGIONAL SANITARY DISTRICT
11. MONUMENTS TO BE SET UPON APPROVAL.

CURVE DATA TABLE			LINE DATA TABLE		LINE DATA TABLE		LINE DATA TABLE		
CURVE	LENGTH	RADIUS	DELTA	LINE BEARING	DISTANCE	LINE BEARING	DISTANCE	LINE BEARING	DISTANCE
C1	211.33'	2069.66'	6°01'28"	L1	N89°29'56"E	51.70'	L8	S74°41'11"E	122.07'
C2	308.53'	1580.09'	11°10'53"	L2	S10°14'40"W	106.52'	L9	S53°07'18"E	111.28'
C3	335.48'	1332.88'	10°07'21"	L3	S10°56'57"W	139.61'	L10	S08°37'49"W	274.39'
C4	483.01'	1609.69'	9°30'10"	L4	S67°48'34"W	20.92'	L11	S11°22'29"W	77.65'
C5	211.81'	2299.50'	5°16'21"	L5	S72°18'00"E	64.07'	L12	S10°04'02"W	193.28'
C6	389.05'	2899.37'	3°44'34"	L6	S71°01'22"E	149.11'	L13	S16°49'12"E	241.76'
				L7	S70°59'24"E	111.61'	L14	S16°49'12"E	183.67'

7878 N. 16th Street
Suite 300
Phoenix, AZ 85018

DIBBLE

MINOR LAND DIVISION

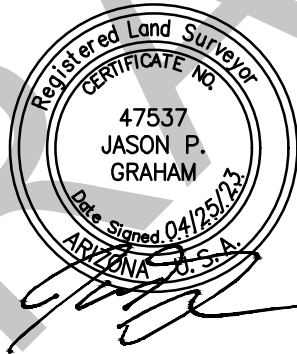
PROJECT NO. 121133 | DATE: APR 2023 | SCALE: AS SHOWN | REVIEWED: JPK
SURVEYED: MAR 2023 | DRAWN: ADC | REVIEWED: JPK
FIELD WORK: ABC/JEN

SHEET

EXHIBIT "A"
LEGAL DESCRIPTION
FOR
PARCEL 1

A PARCEL OF LAND SITUATED IN A PART OF THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 1 NORTH, RANGE 15 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1, MINOR LAND DIVISION, RECORD OF SURVEY NUMBER 5730, RECORDS OF GILA COUNTY, ARIZONA.



Appendix E

Record of Public Participation

DRAFT

Appendix E Record of Public Participation

----- Will be provided by CAG Staff upon CAG Regional Council Approval -----

DRAFT

Appendix F

Communications

DRAFT



Douglas A. Ducey
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Misael Cabrera
Director

June 3, 2016

Mr. Alan Urban
Central Arizona Governments
Community Development Manager
1075 S. Idaho Road, Suite 300
Apache Junction, AZ 85119

Re: DMA Status of Sanitary Districts in Gila County

Dear Mr. Urban:

The letter is in response to your February 12, 2016 request for clarification as to the current status of the Pinal Sanitary, Cobre Valley Sanitary and Tri-City Regional Sanitary Districts as designated management agencies under Section 208 of the Clean Water Act.

The *Central Arizona Association of Governments 208 Areawide Water Quality Management Plan Update, September, 1994* identifies both the Pinal Sanitary District and Cobre Valley Sanitary District as designated management agencies (DMA). Pinal and Cobre Valley received their DMA designations in 1983 and 1985, respectively, in order to address serious water quality issues in their areas including failing septic systems and use of cesspools.

In 2011, the Tri-City Regional Sanitary District (TRSD) was formed through the merger of the Pinal and Cobre Valley Sanitary Districts. In the next 12-18 months, TRSD will be preparing a 208 Water Quality Management Plan amendment to the *2016 CAG Areawide Water Quality Management Plan* requesting approval to be the DMA for the areas currently assigned to the Pinal Sanitary and Cobre Valley Sanitary Districts and to identify TRSD's plan to address the water quality issues within the District. Until such time as an amendment is processed through CAG and ADEQ and approved by the EPA, Pinal and Cobre Valley remain the recognized DMAs but are being administered by TRSD.

ADEQ apologizes for the delayed response to your request. This particular situation has no precedent that we are aware of, so it has taken some additional time for both historical and legal review. If you have any additional questions, please contact me directly at 602.771.2321.

Sincerely,


Trevor Baggione, Director
Water Quality Division

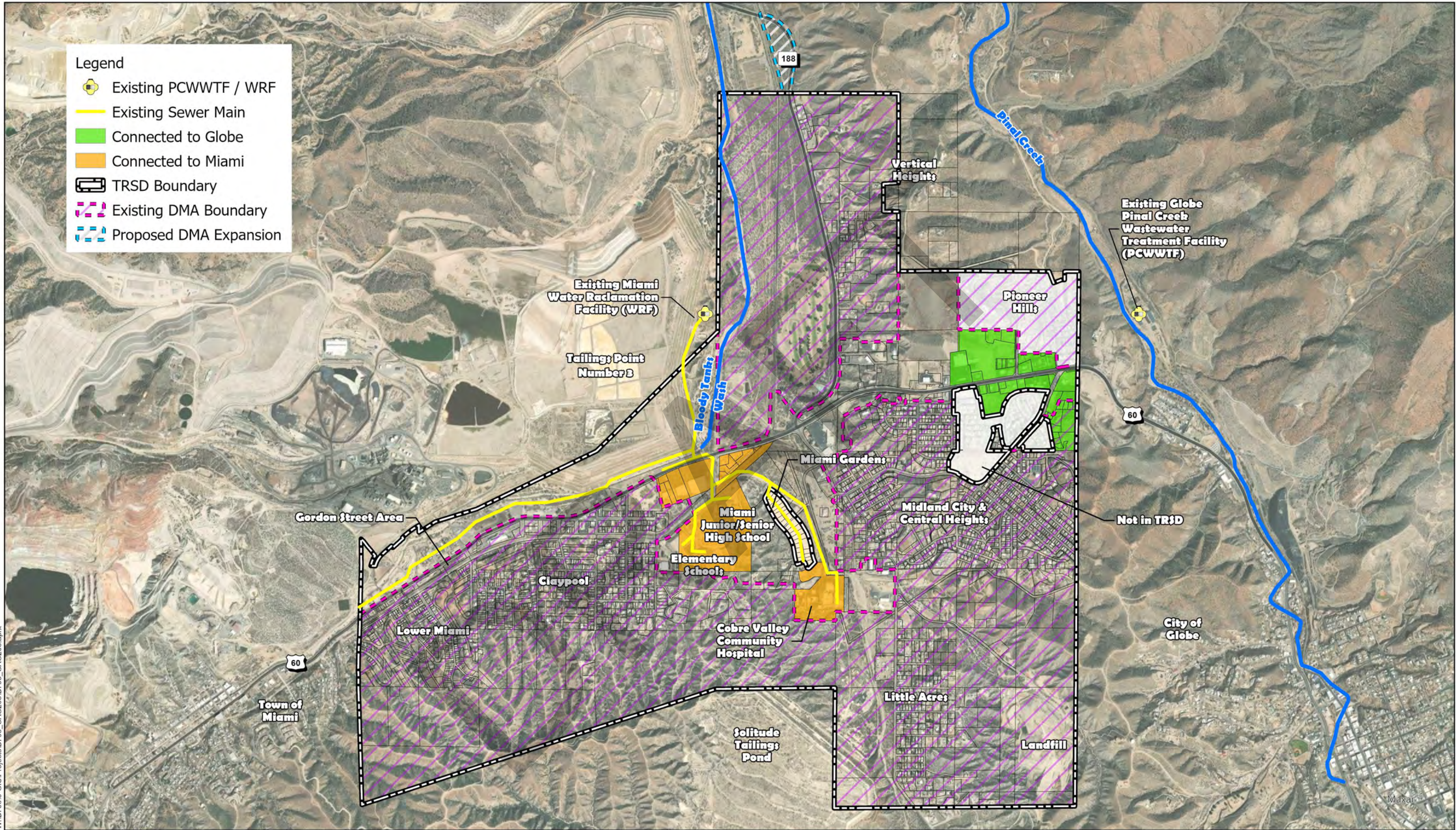
cc: Jared Vollmer, U.S. Environmental Protection Agency, Region 9
Bob Zache, President, Tri-City Regional Sanitary District

DRIFT COPY

Appendix G

Maps

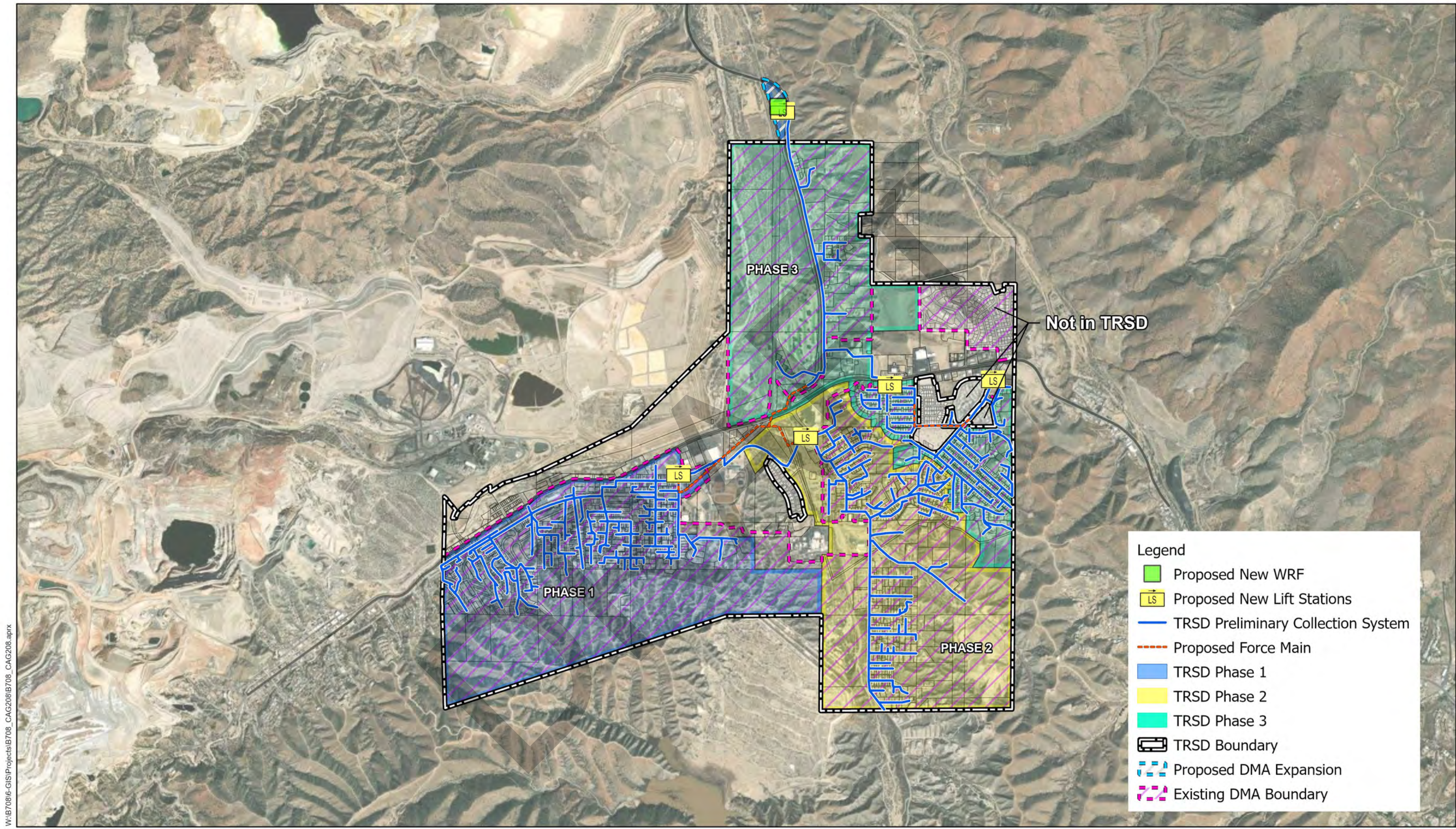
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TRI-CITY REGIONAL SANITARY DISTRICT

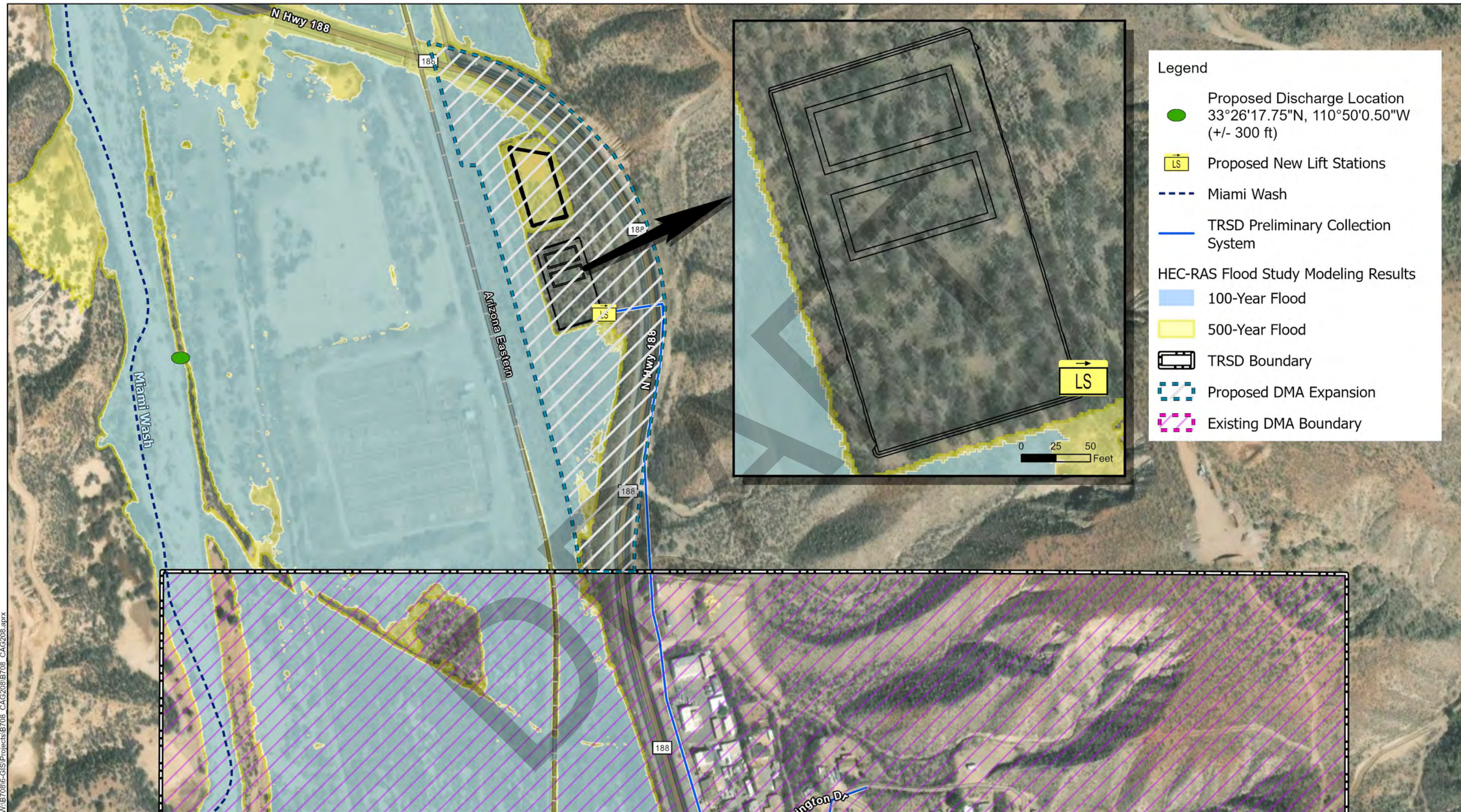
EXISTING FACILITIES

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TRI-CITY REGIONAL SANITARY DISTRICT

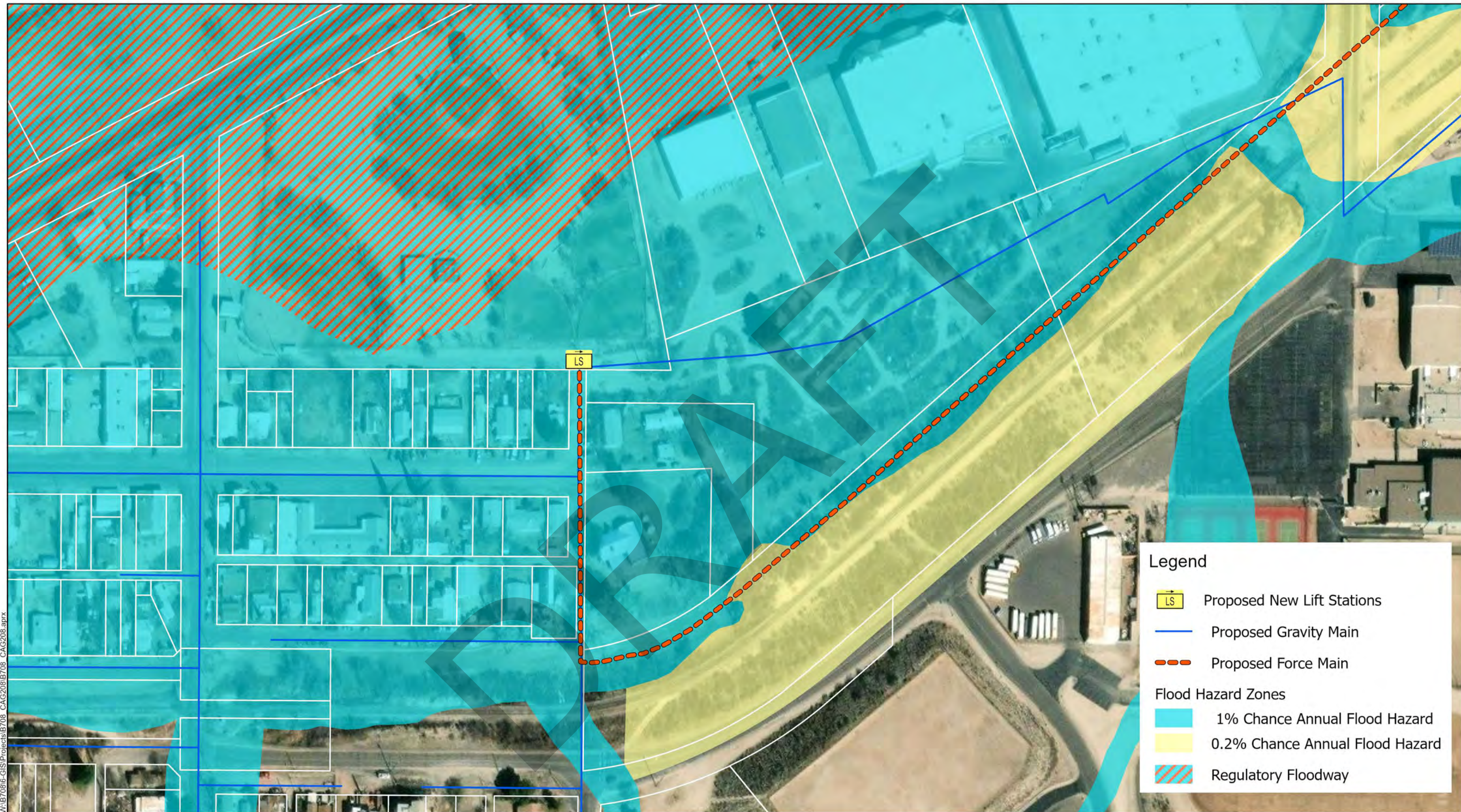
PRELIMINARY COLLECTION SYSTEM



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TRI-CITY REGIONAL SANITARY DISTRICT

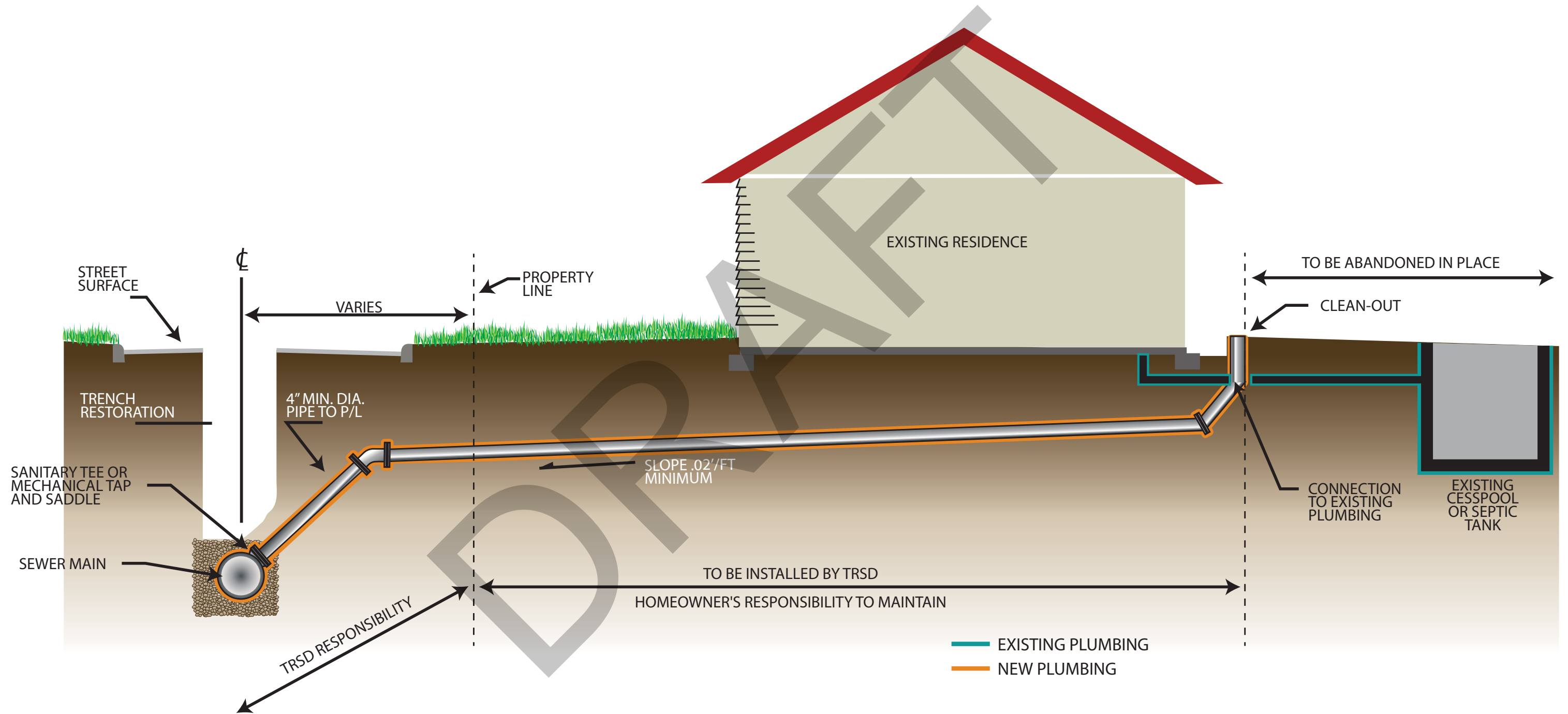
PROPOSED PROJECT WRF

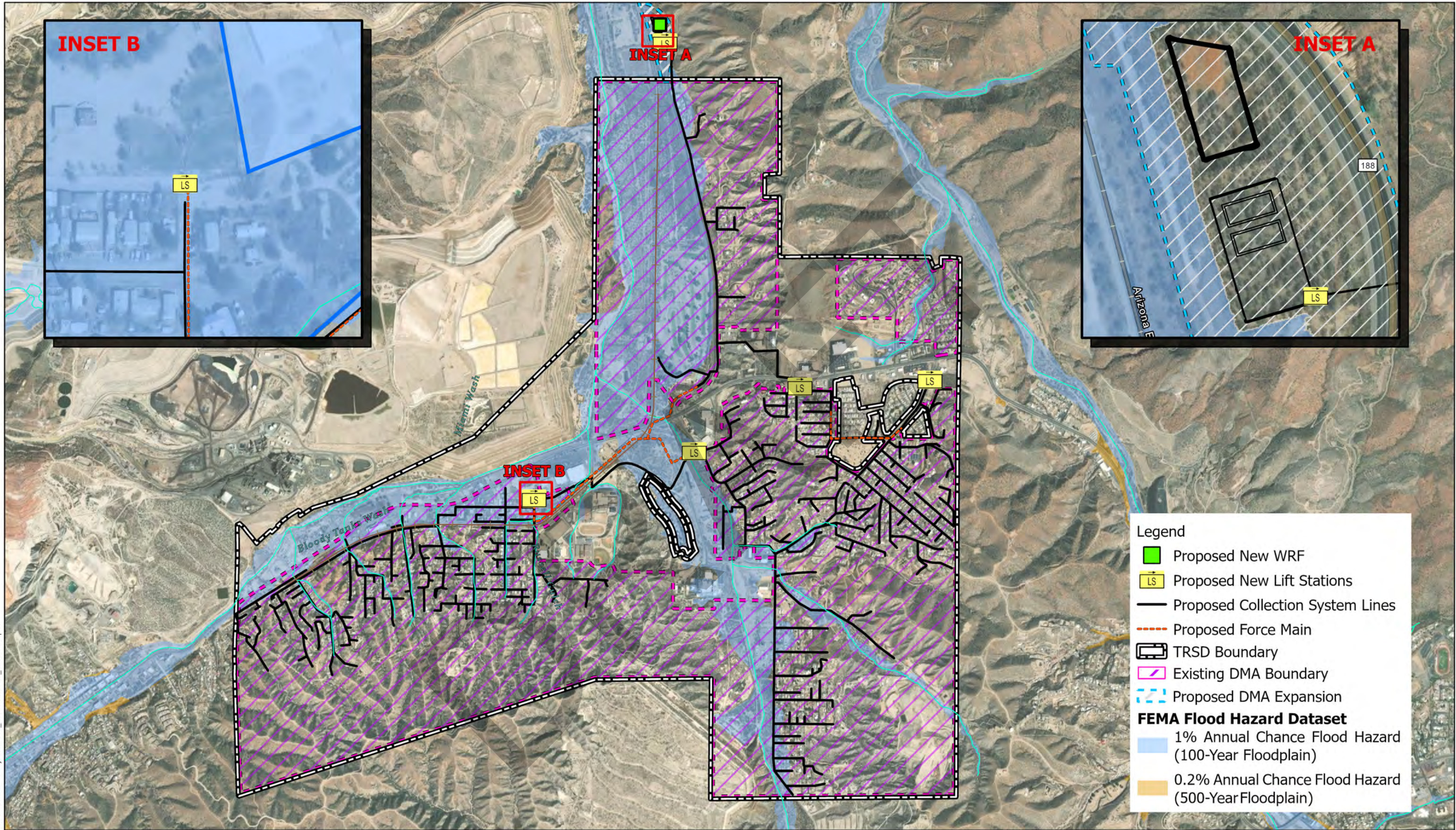


TRI-CITY REGIONAL SANITARY DISTRICT

NEW TRSD LIFT STATION

EXHIBIT 5 - TYPICAL LATERAL CONNECTION

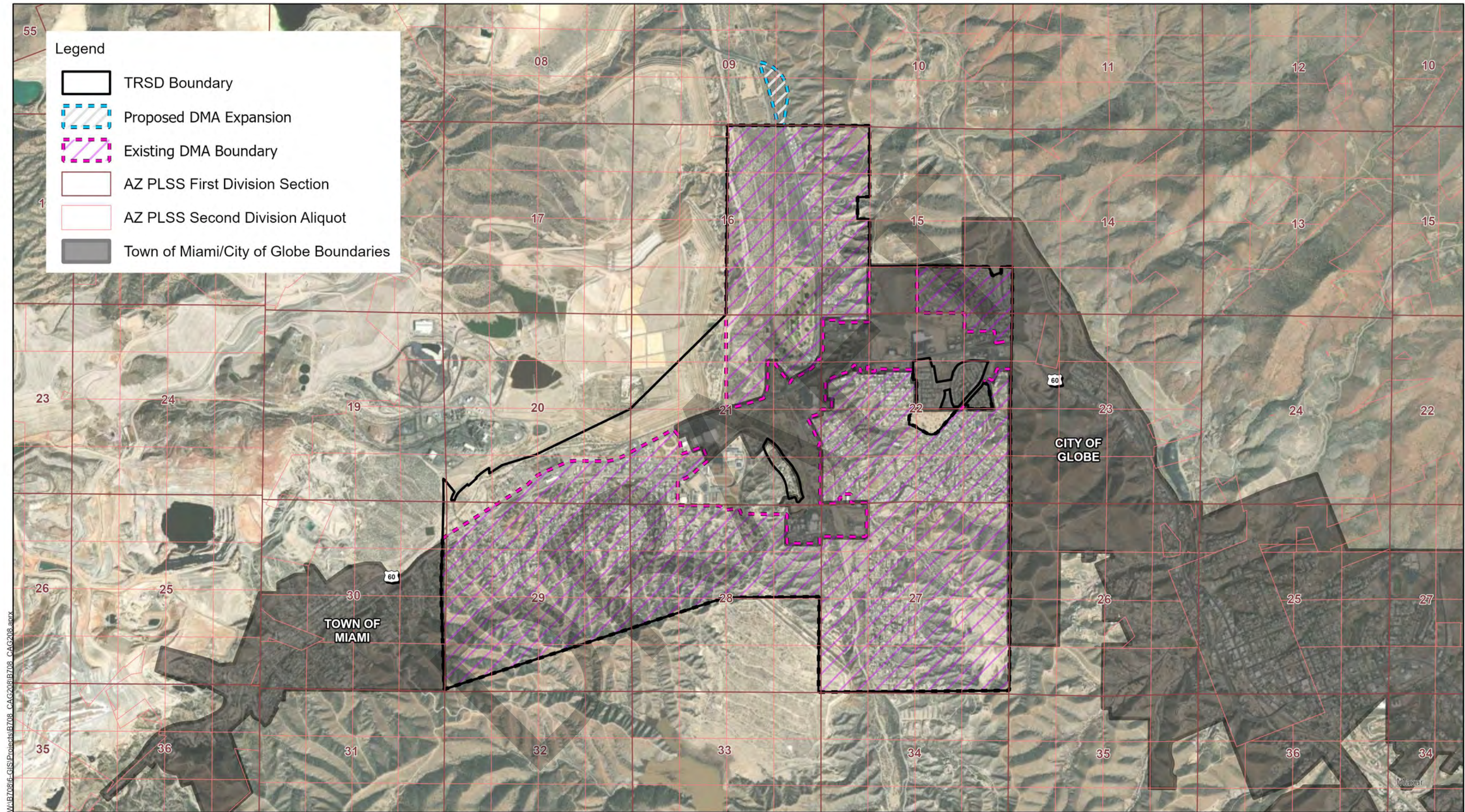




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TRI-CITY REGIONAL SANITARY DISTRICT

FLOODPLAIN



TRI-CITY REGIONAL SANITARY DISTRICT

TRSD DMA

Appendix H

Affected Population

DRAFT



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase I

Summary		Census 2010
Population		1,586
Population Density (per sq. mile)		980
Minority Population		659
% Minority		42%
Households		644
Housing Units		777
Land Area (sq. miles)		1.62
% Land Area		99%
Water Area (sq. miles)		0.01
% Water Area		1%

Population by Race	Number	Percent
Total	1,586	-----
Population Reporting One Race	1,552	98%
White	1,315	83%
Black	14	1%
American Indian	32	2%
Asian	6	0%
Pacific Islander	0	0%
Some Other Race	186	12%
Population Reporting Two or More Races	34	2%
Total Hispanic Population	599	38%
Total Non-Hispanic Population	987	62%
White Alone	927	58%
Black Alone	14	1%
American Indian Alone	28	2%
Non-Hispanic Asian Alone	6	0%
Pacific Islander Alone	0	0%
Other Race Alone	2	0%
Two or More Races Alone	11	1%

Population by Sex	Number	Percent
Male	752	47%
Female	834	53%

Population by Age	Number	Percent
Age 0-4	93	6%
Age 0-17	387	24%
Age 18+	1,199	76%
Age 65+	303	19%

Households by Tenure	Number	Percent
Total	644	
Owner Occupied	507	79%
Renter Occupied	137	21%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase I

Summary of ACS Estimates		2011 - 2015
Population		1,922
Population Density (per sq. mile)		1,188
Minority Population		660
% Minority		34%
Households		696
Housing Units		863
Housing Units Built Before 1950		356
Per Capita Income		17,719
Land Area (sq. miles) (Source: SF1)		1.62
% Land Area		99%
Water Area (sq. miles) (Source: SF1)		0.01
% Water Area		1%

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	1,922	100%	507
Population Reporting One Race	1,895	99%	738
White	1,795	93%	508
Black	0	0%	12
American Indian	0	0%	20
Asian	0	0%	42
Pacific Islander	0	0%	12
Some Other Race	100	5%	144
Population Reporting Two or More Races	28	1%	30
Total Hispanic Population	660	34%	252
Total Non-Hispanic Population	1,262		
White Alone	1,262	66%	450
Black Alone	0	0%	12
American Indian Alone	0	0%	12
Non-Hispanic Asian Alone	0	0%	42
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	0	0%	12
Population by Sex			
Male	987	51%	300
Female	936	49%	246
Population by Age			
Age 0-4	160	8%	95
Age 0-17	491	26%	162
Age 18+	1,432	74%	293
Age 65+	449	23%	128

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.
Source: U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase I

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	1,262	100%	300
Less than 9th Grade	88	7%	80
9th - 12th Grade, No Diploma	201	16%	154
High School Graduate	354	28%	110
Some College, No Degree	508	40%	155
Associate Degree	134	11%	87
Bachelor's Degree or more	111	9%	74
Population Age 5+ Years by Ability to Speak English			
Total	1,762	100%	509
Speak only English	1,411	80%	410
Non-English at Home ¹⁺²⁺³⁺⁴	351	20%	176
¹ Speak English "very well"	286	16%	146
² Speak English "well"	22	1%	36
³ Speak English "not well"	0	0%	17
⁴ Speak English "not at all"	44	2%	73
³⁺⁴ Speak English "less than well"	44	2%	73
²⁺³⁺⁴ Speak English "less than very well"	65	4%	78
Linguistically Isolated Households*			
Total	7	100%	22
Speak Spanish	7	100%	19
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	696	100%	175
< \$15,000	106	15%	87
\$15,000 - \$25,000	135	19%	72
\$25,000 - \$50,000	211	30%	84
\$50,000 - \$75,000	173	25%	117
\$75,000 +	71	10%	104
Occupied Housing Units by Tenure			
Total	696	100%	175
Owner Occupied	523	75%	177
Renter Occupied	173	25%	85
Employed Population Age 16+ Years			
Total	1,459	100%	394
In Labor Force	772	53%	283
Civilian Unemployed in Labor Force	114	8%	84
Not In Labor Force	687	47%	243

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location

Ring (buffer): 0-mile radius

Description: TRSD Phase I

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	1,762	100%	509
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Population by Language Spoken at Home is available at the census tract summary level and up.



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase II

Summary	Census 2010
Population	1,490
Population Density (per sq. mile)	1,397
Minority Population	515
% Minority	35%
Households	597
Housing Units	689
Land Area (sq. miles)	1.07
% Land Area	100%
Water Area (sq. miles)	0.00
% Water Area	0%

Population by Race	Number	Percent
Total	1,490	-----
Population Reporting One Race	1,439	97%
White	1,218	82%
Black	14	1%
American Indian	35	2%
Asian	5	0%
Pacific Islander	1	0%
Some Other Race	166	11%
Population Reporting Two or More Races	51	3%
Total Hispanic Population	453	30%
Total Non-Hispanic Population	1,037	70%
White Alone	975	65%
Black Alone	12	1%
American Indian Alone	32	2%
Non-Hispanic Asian Alone	5	0%
Pacific Islander Alone	1	0%
Other Race Alone	1	0%
Two or More Races Alone	12	1%

Population by Sex	Number	Percent
Male	727	49%
Female	763	51%

Population by Age	Number	Percent
Age 0-4	102	7%
Age 0-17	395	27%
Age 18+	1,095	73%
Age 65+	256	17%

Households by Tenure	Number	Percent
Total	597	
Owner Occupied	458	77%
Renter Occupied	138	23%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2010 Summary File 1.



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase II

Summary of ACS Estimates		2011 - 2015
Population		1,780
Population Density (per sq. mile)		1,669
Minority Population		487
% Minority		27%
Households		689
Housing Units		824
Housing Units Built Before 1950		146
Per Capita Income		17,752
Land Area (sq. miles) (Source: SF1)		1.07
% Land Area		100%
Water Area (sq. miles) (Source: SF1)		0.00
% Water Area		0%

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	1,780	100%	507
Population Reporting One Race	1,764	99%	700
White	1,723	97%	508
Black	0	0%	12
American Indian	0	0%	12
Asian	0	0%	12
Pacific Islander	0	0%	12
Some Other Race	41	2%	144
Population Reporting Two or More Races	16	1%	95
Total Hispanic Population	481	27%	302
Total Non-Hispanic Population	1,299		
White Alone	1,293	73%	450
Black Alone	0	0%	12
American Indian Alone	0	0%	12
Non-Hispanic Asian Alone	0	0%	12
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	6	0%	86
Population by Sex			
Male	801	45%	300
Female	980	55%	263
Population by Age			
Age 0-4	106	6%	118
Age 0-17	356	20%	169
Age 18+	1,424	80%	313
Age 65+	313	18%	173

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.
Source: U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase II

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	1,170	100%	335
Less than 9th Grade	79	7%	99
9th - 12th Grade, No Diploma	320	27%	154
High School Graduate	298	25%	200
Some College, No Degree	226	19%	205
Associate Degree	30	3%	87
Bachelor's Degree or more	247	21%	162
Population Age 5+ Years by Ability to Speak English			
Total	1,674	100%	509
Speak only English	1,426	85%	410
Non-English at Home ¹⁺²⁺³⁺⁴	248	15%	176
¹ Speak English "very well"	160	10%	146
² Speak English "well"	71	4%	114
³ Speak English "not well"	12	1%	94
⁴ Speak English "not at all"	4	0%	73
³⁺⁴ Speak English "less than well"	16	1%	94
²⁺³⁺⁴ Speak English "less than very well"	87	5%	114
Linguistically Isolated Households*			
Total	35	100%	59
Speak Spanish	35	100%	58
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	689	100%	180
< \$15,000	158	23%	106
\$15,000 - \$25,000	110	16%	102
\$25,000 - \$50,000	179	26%	95
\$50,000 - \$75,000	102	15%	117
\$75,000 +	139	20%	104
Occupied Housing Units by Tenure			
Total	689	100%	180
Owner Occupied	498	72%	177
Renter Occupied	191	28%	117
Employed Population Age 16+ Years			
Total	1,474	100%	394
In Labor Force	741	50%	298
Civilian Unemployed in Labor Force	26	2%	125
Not In Labor Force	733	50%	312

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase II

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	1,674	100%	509
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Population by Language Spoken at Home is available at the census tract summary level and up.



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase III

Summary	Census 2010
Population	1,042
Population Density (per sq. mile)	734
Minority Population	355
% Minority	34%
Households	455
Housing Units	519
Land Area (sq. miles)	1.42
% Land Area	100%
Water Area (sq. miles)	0.00
% Water Area	0%

Population by Race	Number	Percent
Total	1,042	-----
Population Reporting One Race	1,015	97%
White	850	82%
Black	12	1%
American Indian	17	2%
Asian	6	1%
Pacific Islander	4	0%
Some Other Race	126	12%
Population Reporting Two or More Races	27	3%
Total Hispanic Population	311	30%
Total Non-Hispanic Population	731	70%
White Alone	687	66%
Black Alone	11	1%
American Indian Alone	16	2%
Non-Hispanic Asian Alone	6	1%
Pacific Islander Alone	2	0%
Other Race Alone	1	0%
Two or More Races Alone	8	1%

Population by Sex	Number	Percent
Male	502	48%
Female	540	52%

Population by Age	Number	Percent
Age 0-4	56	5%
Age 0-17	252	24%
Age 18+	790	76%
Age 65+	198	19%

Households by Tenure	Number	Percent
Total	455	
Owner Occupied	349	77%
Renter Occupied	106	23%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase III

Summary of ACS Estimates		2011 - 2015
Population		1,032
Population Density (per sq. mile)		727
Minority Population		461
% Minority		45%
Households		509
Housing Units		571
Housing Units Built Before 1950		35
Per Capita Income		17,722
Land Area (sq. miles) (Source: SF1)		1.42
% Land Area		100%
Water Area (sq. miles) (Source: SF1)		0.00
% Water Area		0%

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	1,032	100%	428
Population Reporting One Race	973	94%	607
White	973	94%	415
Black	0	0%	12
American Indian	0	0%	12
Asian	0	0%	12
Pacific Islander	0	0%	12
Some Other Race	0	0%	144
Population Reporting Two or More Races	59	6%	95
Total Hispanic Population	446	43%	302
Total Non-Hispanic Population	586		
White Alone	571	55%	385
Black Alone	0	0%	12
American Indian Alone	0	0%	12
Non-Hispanic Asian Alone	0	0%	12
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	15	1%	86
Population by Sex			
Male	555	54%	284
Female	477	46%	263
Population by Age			
Age 0-4	14	1%	118
Age 0-17	246	24%	169
Age 18+	786	76%	313
Age 65+	206	20%	173

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.

Source: U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: TRSD Phase III

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	728	100%	335
Less than 9th Grade	127	17%	99
9th - 12th Grade, No Diploma	40	6%	136
High School Graduate	264	36%	200
Some College, No Degree	247	34%	205
Associate Degree	14	2%	87
Bachelor's Degree or more	50	7%	162
Population Age 5+ Years by Ability to Speak English			
Total	1,019	100%	417
Speak only English	761	75%	398
Non-English at Home ¹⁺²⁺³⁺⁴	258	25%	176
¹ Speak English "very well"	153	15%	146
² Speak English "well"	0	0%	114
³ Speak English "not well"	106	10%	94
⁴ Speak English "not at all"	0	0%	73
³⁺⁴ Speak English "less than well"	106	10%	94
²⁺³⁺⁴ Speak English "less than very well"	106	10%	114
Linguistically Isolated Households*			
Total	0	0%	59
Speak Spanish	0	0%	58
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	509	100%	180
< \$15,000	166	33%	106
\$15,000 - \$25,000	117	23%	102
\$25,000 - \$50,000	121	24%	95
\$50,000 - \$75,000	33	7%	97
\$75,000 +	71	14%	94
Occupied Housing Units by Tenure			
Total	509	100%	180
Owner Occupied	282	55%	135
Renter Occupied	227	45%	117
Employed Population Age 16+ Years			
Total	859	100%	341
In Labor Force	577	67%	298
Civilian Unemployed in Labor Force	94	11%	125
Not In Labor Force	283	33%	312

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location

Ring (buffer): 0-mile radius

Description: TRSD Phase III

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	1,019	100%	417
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

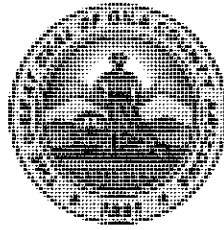
Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Population by Language Spoken at Home is available at the census tract summary level and up.

Appendix I
2012 Sewage Treatment Study

DRAFT

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GILA COUNTY COMMUNITY DEVELOPMENT

Robert Gould, Director

Joe Mendoza, Deputy Director

SEWAGE TREATMENT STUDY TRI-CITY REGIONAL SANITARY DISTRICT NOVEMBER 2012

by

Jake Garrett, PE,
Gila County Wastewater Department Manager
Jim Berry

Gila County Wastewater Department Engineering Technician

Why the Maps: The project originally started as a visual method of identifying areas of concern for catastrophic failure of sewage handling and major public health concerns. It now demonstrates the predominance of cesspool use within Tri-City Regional Sanitary District (TRSD).

The Data for the Maps: Every property file in the possession of the Gila County Wastewater Department was examined to find sewage system permits of any type and citizen complaints for surfacing sewage or gray water leaving the property. A former Health Department Director told us that the earliest Gila County records for septic system permits are dated in 1979, that by 1984 Gila County had become "good" at seeing that septic systems were permitted, that permit requests were made by mail and that data provided was minimal and accuracy was lacking. As a result, by policy, Gila County does not recognize any percolation test results for tests conducted prior to 1990 due to the crude percolation test methods used.

Only 5 years of complaint data is available beginning in mid-2007. Prior to that time the Arizona Department of Environmental Quality (ADEQ) required that all complaint data be filed by street address rather than parcel number for auditing purposes. Consequently that information was not part of the property file and was discarded when ADEQ's audit directions changed in 2007.

A complaint is resolved and the public health hazard corrected when the property owner stops sewage from surfacing and/or gray water from ponding on or leaving his property and the contaminated area is properly cleaned and disinfected. If the property owner does not respond in 24 hours an escalating, 3-step, 3-day written violation process is begun which culminates in a Notice of Violation and Demand for Compliance. Should the owner not comply with the Demand for Compliance water service to the home is discontinued per Arizona Statute.

The Area: Tri-City Regional Sanitary District encompasses the unincorporated area between the Town of Miami and the City of Globe in southern Gila County, Arizona. The majority of this area was developed for housing during the first ½ of the 20th century mining boom. Subdivisions featured lots 25' x 150' (3750 ft²) with a small area in the

bottom of the canyon that was suitable for home and cesspool construction with the rear portion of the lot rising very steeply uphill. In addition the ground transitioned from runoff deposited loose material to a very hard and nonporous Gila Conglomerate as the building site approached the foot of the slope. Today most of these homes have nowhere close to enough usable land in which a replacement septic system can be installed. A few of these properties might qualify to use the enhanced sewage treatment qualities of an alternative system to overcome the lot limitations. In those cases the system cost is normally more than the appraised value of the property.

Cesspool Facts: Interviews with Gila County Health Department personnel and local septic system contractors with personal knowledge about the construction practices, public attitudes and permitting during the time period from late 1950's through the early 2000's produced the following recollections:

- In 1976 the USE of cesspools was prohibited by Engineering Bulletin 12, the Arizona Department of Health Service guidance document for the design and installation of septic and alternative systems.
- Homes served by cesspools were constructed beginning in 1907 or earlier. These cesspools are now 105 years old ... or new cesspools were constructed to replace those that filled or failed (probably multiple times) until the mid to late 1980's when permitting became expected by a majority of citizens.
- As of this date no action has been taken by the State of Arizona to enforce the prohibition on the use of cesspools in areas where pollution of ground or surface waters cannot be proven. Absent statewide enforcement the use of cesspools by an individual home in these areas has been allowed to continue until it fails either structurally or hydraulically.
- By policy Gila County does not allow expansion or remodeling of any home served by a cesspool.
- A former Gila County Health Department Director told us that:
 - Public attitudes shifted toward installing septic systems rather than cesspools in 1979
 - At that time most permits were mailed to the Globe Health Department offices.
- A local contractor stated that his business got busy installing septic systems in early 1970.
- No permits were ever issued for cesspools however they are referenced in the building files upon occasion. Those mentioned are shown on the maps.
- Banks throughout Arizona are now and have been for 3-5 years declining to lend on homes served by a cesspool.
- It is estimated that the average lot size within the TRSD boundary is 5,000 ft² while the mining subdivisions had lot sizes of 3,750 ft². These lot sizes equate to an average density of 8.72 to 11.63 homes per acre. Current regulations would require any subdivision with a density of greater than one (1) home per acre to reduce the Nitrogen contribution to the ground in addition to removing the biological contaminants and viruses through advanced treatment systems or a sewer collection and treatment system.

Conclusions that can be drawn from the maps:

- There are very few permitted septic systems within the TRSD boundary.
- Very few unpermitted septic systems have been found in the building files.
- Cesspools are likely used for sewage disposal on all lots that do not have either a permitted or unpermitted system. This represents vast majority of homes within TRSD.
- Some multiple lot properties have been able to replace failed cesspools with septic systems. Usually there are multiple cesspools replaced by one septic system.
- Some functioning cesspools have been identified in the last 5 years.
- Several cesspools have failed and the properties have become unusable.
- Gray water complaints represent properties that are experiencing cesspool problems. Homeowners usually remove their gray water from the cesspool in an effort to extend its life. Many of these properties have a history of multiple complaints in the last 5 years indicating that their cesspool is nearing failure. .

- All lots that do not show a permitted system (since 2001 rule) are in danger of failure as is evidenced by the number of surfacing sewage complaints and Notices of Violation (NOV's)
- Based on the sewage and gray water complaint and NOV properties it is estimated that between 5% and 10% of the homes within TRSD have experienced cesspool problems within the last 5 years

Estimate of homes within TRSD using cesspools and sub-standard septic systems:

This estimate is presented in support of the maps and conclusions that are presented above. An estimate of the number of homes served by cesspools and substandard septic systems within the TRSD boundary was made from the 2000 U.S. Census Bureau data for Gila County by logical reasoning and the following assumptions:

- Percentages of homes constructed in southern Gila County is represented by the sum of Globe and Miami home construction and those in northern Gila County is represented by Payson home construction.
- Cesspool use stopped in 1969.
- Substandard septic systems were installed through 1989 when an updated Bulletin 12 was introduced by the Arizona Department of Environmental Quality.

From these rough calculations it is reasonable to assume that there are at least 1342 operating cesspools and 266 operating substandard septic systems within the TRSD boundary. **This estimate would then say that there are 1608 homes within TRSD that are served by cesspools or substandard septic systems.**

Jake Garrett
Wastewater Department Manager
November 14, 2012



GILA COUNTY COMMUNITY DEVELOPMENT

Robert Gould, Director

Cesspools: Water Quality and Your Property Value

The Hard, Cold Facts about Cesspools:

A cesspool is an outhouse with running water. Cesspools discharge untreated waste into the soil that will ultimately contaminate the ground water. ***Cesspools have not been approved for use in Arizona since 1976 because they are a major source of ground water contamination.*** No permits for the construction of new cesspools have been issued since that time.

Cesspools may not be repaired in any way. When a cesspool fails it must be replaced by an approved Onsite Wastewater Treatment and Disposal System or the property must cease to be occupied. Replacement is very difficult or impossible due to small lot size, poor soils, proximity to streams and other severe lot constraints.

In current ADEQ regulations cesspools are not a permitted method of wastewater disposal and are prohibited expressly under R18-9-A309(A)(4) and R18-5-408(D). Because of this fact many financial institutions are not lending on properties serviced by a cesspool.

Cesspool Definition:

Underground pit into which raw household wastewater is discharged and from which the liquid seeps into the surrounding soil; may or may not be partially lined.

How a cesspool functions:

A cesspool is a covered hole or pit for receiving sewage from a house. Another way of thinking about a cesspool is that it is an outhouse with running water. Usually the walls are constructed out of concrete, brick or concrete blocks and the top cover is usually a poured concrete slab or timbers. The constructions of the sidewalls are loose to allow the effluent water to penetrate through the holes, allowing the water to pass into the native soil while the solids build up in the pit.

This solid waste, very similar to what you see in outhouse pits, may partially crumble into smaller pieces over time and be partially carried into the environment in a totally untreated state by the new liquids entering the cesspool. This material is a host for many disease-causing viruses, bacteria, and parasites. Unlike septic systems, cesspools provide no treatment of the raw sewage and thus discharge untreated human waste into the soil and ultimately contaminate the ground water.

By contrast, septic systems remove 100% of the disease-causing viruses, bacteria, and parasites. In a properly designed and installed septic system the tank retains 60 to

70% of the solids, oil, and grease that pass into the system and provides some treatment. The partially treated wastewater is then discharged into the leach lines, where the surrounding soil provides final treatment of the sewage prior to its discharge into the environment.

Cesspools in Gila County:

Cesspools were the preferred method of waste disposal in Gila County through the late 1960's. At that time, a transition to installation of septic systems started and by 1984 all permitted installations were septic systems. Based on US Census 2000 information, it is estimated that there are nearly 3,000 cesspools still in operation in Gila County. Most properties utilizing cesspools for human waste disposal are located in dense unincorporated areas in southern Gila County and the forest subdivisions of northern Gila County, Tonto Basin and Young. Dense from an on-site sewage system point of view means greater than 2 homes per acre. Most of these densely populated areas have 8-10 homes per acre. Many of these areas are along and very close to flowing streams and are major contributors to stream pollution.

Cesspool Failure:

When a cesspool's lid, sides or structural members deteriorate or collapse and sewage comes to the surface or backs up into the home, it is determined to have failed and must be corrected immediately. Possible corrective actions include:

- Ceasing use of the home or
- Install an appropriate wastewater treatment system.

Most cesspools are located on extremely small lots. In addition, these lots usually have very poor soil conditions and steep slopes and/or large retaining walls and may be very near running streams. *These conditions will almost always preclude installation of a conventional septic system.* In many cases installation of a more costly alternative sewage treatment system that treats sewage to a much higher degree, requires less disposal area and overcomes many site specific obstacles will not be possible.

Arizona Department of Environmental Quality (ADEQ) Cesspool Statement:

"ADEQ recognizes that a number of residential cesspools remain in operation in Gila County and across the state. However, since their operation is generally prohibited and They unacceptably endanger water quality and the public health and safety ... their continued operation should not be encouraged. ADEQ believes that home inspectors and on-site transfer inspections that may occur should encourage potential buyers to require the installation of a permitted facility."

Gila County Policy Statement

The current Gila County Wastewater Department policy regarding **waste systems installed prior to 1976** is stated in the Gila County Health Department letter dated 12/9/1996 and partially quoted here:

"Any system that was installed prior to 1976 including but not limited to cesspools, homemade septic tanks, or other sewage disposal hybrid devices would be grandfathered in until these "systems" fail or the residence plumbing is modified."

In support of this policy the following practices were implemented:

Nuisance Complaint Investigation:

Should failure be discovered through the complaint process, while investigating a possible Environmental Nuisance or during any normal business activity undertaken by Gila County, the failure must be immediately corrected. Possible corrective actions include:

- Ceasing use of the home or
- Install an appropriate wastewater treatment system.

(Failure means any structural or hydraulic failure and is evidenced by such things as collapsed lids, deterioration of sidewall structural components, back-up of sewage into the home, groundwater contamination or surfacing of sewage.)

Building Clearance:

The Wastewater Department will not approve the submittal of building plans for any property served by a cesspool if those plans expand the footprint of buildings or structures on the property or alter the wastewater flow characteristics (bedrooms or plumbing fixtures) of the property.

Conclusion:

Don't let your dependence on a cesspool get you into a hole that you can't dig yourself out of!

DRAFT

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GILA COUNTY COMMUNITY DEVELOPMENT

Robert Gould, Director

August 8, 2008

Wastewater Department Policy Statement
Re: Cesspool Replacement Policy

Policy Statement

The current Gila County Wastewater Department policy regarding *waste systems installed prior to 1976* is stated in the Gila County Health Department letter dated 12/9/1996 and partially quoted here:
“**Any** system that was installed prior to 1976 including but not limited to cesspools, homemade septic tanks, or other sewage disposal hybrid devices would be grandfathered in until these “systems” fail or the residence plumbing is modified.”

In support of this policy the following practices were implemented:

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- o Install an appropriate wastewater treatment system.

(**Failure** means any structural or hydraulic failure and is evidenced by such things as collapsed lids, deterioration of sidewall structural components, back-up of sewage into the home, groundwater contamination or surfacing of sewage.)

Building Clearance:

- The Wastewater Department will not approve the submittal of building plans for any property served by a cesspool if those plans alter the wastewater flow characteristics (increase number of bedrooms or plumbing fixtures) on the property.

Respectfully,

Jake Garrett, P.E.
Wastewater Department Manager

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GILA COUNTY COMMUNITY DEVELOPMENT

Robert Gould, Director

USE OF CESSPOOLS IS PROHIBITED BY LAW

If you have a cesspool ... you are
BREAKING THE LAW
Every Time You Flush

Arizona Administrative Code (AAC)

R18-9-A309. General Provisions for On-site Wastewater Treatment Facilities

- A. General requirements and prohibitions.
1. No person shall discharge sewage or wastewater that contains sewage from an on-site wastewater treatment facility except under an Aquifer Protection Permit issued by the Director.
 2. A person shall not install, allow to be installed, or maintain a connection between any part of an on-site wastewater treatment facility and a drinking water system or supply so that sewage or wastewater contaminates the drinking water.
 3. A person shall not bypass or release sewage or partially treated sewage that has not completed the treatment process from an on-site wastewater treatment facility.
 4. **A person shall not use a cesspool for sewage disposal.**

...

R18-5-408. Individual sewage disposal systems

- A. Recommendations are found in the engineering bulletins of the Department and such additional requirements as may be provided by local health departments to assist in approval regarding the design, installation and operation of individual sewage disposal systems. Copies of these bulletins may be obtained from the Department.
- B. Where soil conditions and terrain features or other conditions are such that individual sewage disposal systems cannot be expected to function satisfactorily or where groundwater or soil conditions are such that individual sewage disposal systems may cause pollution of groundwater, they are prohibited.
- C. Where such installations may create an unsanitary condition or public health nuisance, individual sewage disposal systems are prohibited.
- D. The use of cesspools is prohibited.**

...



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov



Stephen A. Owens
Director

April 7, 2008

Jake Garrett, P.E.
Gila County Community Development Division
Wastewater Department Manager
714 S. Beeline Hwy, Ste 200
Payson, AZ 85541

Dear Mr. Garrett:

We have received your letter dated March 18, 2008 regarding cesspools. First, any information provided to you by our Department suggesting that cesspools are to be inspected or transferred under A.A.C. Title 18 is incorrect. Cesspools are not a permitted method of wastewater disposal and are prohibited expressly under R18-9-A309(A)(4) and R18-5-408(D). Accordingly, they are not subject to the notice of transfer requirements of R18-9-A304, the presale inspection rules of R18-9-A316, or the repair provisions of R18-9-A309(A)(9).

In addition to being prohibited under the "General Provisions for On-site Wastewater Treatment Facilities" section of the rule, cesspools do not meet the requirement of the R18-9-B301(I)(1)(b). That provision refers specifically to "[a]n on-site wastewater treatment facility with flows less than 20,000 gallons per day operating before January 1, 2001." The definition of "on-site wastewater treatment facility" is provided in rule (R18-9-101(27));

"On-site wastewater treatment facility" means a conventional septic tank system or alternative system installed at a site to treat and dispose of wastewater, predominantly of human origin, generated at that site. ...

ADEQ recognizes that a number of residential cesspools remain in operation in Gila County and across the state. However, since their operation is generally prohibited and, as your letter effectively conveys, they unacceptably endanger water quality and the public health and safety, their continued operation should not be encouraged. ADEQ believes that home inspectors and on-site transfer inspections that may occur should encourage potential buyers to require the installation of a permitted facility. Also, we would like to explore with you ways to educate current and potential homeowners of the prohibition against cesspool operation and appropriate methodologies to phase out their use in Gila County.

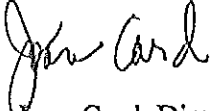
Northern Regional Office
1801 W. Route 66 • Suite 117 • Flagstaff, AZ 86001
(928) 779-0313

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

Jake Garrett
April 2, 2008
Page 2

Please feel free to call me at (602) 771-2306 or David Lelsz at (602) 771-4447.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joan Card".

Joan Card, Director
Water Quality Division

DRAFT

Appendix E

Record of Public Participation

208 CAG Water Quality Management Plan Amendment

For

Tri-City Regional Sanitary District

CAG 208 ID 2023-01

DRAFT

Appendix E – Record of Public Participation

Section 1.0 Public Hearing Notification:

- Affidavit of Publication
- Public Hearing Notice
- Public Notification Mailing List

Section 2.0 Public Hearing Responsiveness Summary:

- Public Hearing Summary, Sign in Sheet, information cards, Copy of Power Point presentation
- Other Public Comments Received During comment period and formal Committee and Regional Council review

Section 3.0 Formal Committee and Regional Council Review:

- **Environmental Planning Committee (EPC) – 03/05/24**
 - Agenda
 - Meeting Minutes
- **Environmental Planning Committee (EPC) – xx/xx/xx**
 - Agenda
 - Meeting Minutes
- **Management Committee: - xx/xx/xx**
 - Agenda
 - Meeting Minutes
- **Regional Council: - xx/xx/xx**
 - Agenda
 - Meeting Minutes

DRAFT

The Arizona Silver Belt Newspaper

298 N. Pine Street

Globe, AZ 85501

Telephone: 928-425-7121

Affidavit of Publication

State of Arizona)

County of Gila) ss

I am a citizen of the United States and a resident of the State of Arizona; I am over the age of eighteen years, and not a party to or interested in the entitled matter. I am the principal clerk of the printer and publisher of the ARIZONA SILVER BELT, a newspaper published in the English language in the city of GLOBE, county of GILA, state of Arizona and adjudged a newspaper of general circulation.

The Arizona Silver Belt, is a newspaper which is published weekly, is of general circulation and is in compliance with the Arizona Revised Statutes §§ 10-140.34 & 39-201.A & B. (Please note, publication has to be completed within 60 days of filing.) The notice has been published for one (1) week in the newspaper listed above on May 15, 2024.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Tina Nixon

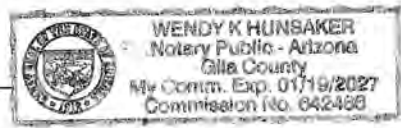
Tina Nixon

Subscribed and sworn to before me, a Notary Public in and for said County and State, this 11th day of June, 2024.

Wendy K Hunsaker

Notary Public

My Commission Expires: *1/19/27*



CENTRAL ARIZONA GOVERNMENTS

Public Notice

NOTICE OF PUBLIC HEARING ON THE TRI-CITY REGIONAL SANITARY DISTRICT'S CENTRAL ARIZONA GOVERNMENTS (CAG) SECTION 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT TO IDENTIFY A NEW LOCATION FOR THE PROPOSED WASTEWATER TREATMENT FACILITY THAT WAS APPROVED IN THE PREVIOUS PLAN AMENDMENT; EXPAND THE CURRENT DMA BOUNDARY TO INCLUDE THE PARCEL OF THE NEW LOCATION SITE; AND APPROVE THE NEW DISCHARGE LOCATION POINT DUE TO THE NEW PROPOSED LOCATION WITHIN GILA COUNTY, ARIZONA.

CAG will conduct a public hearing on:

DATE: Monday, July 1, 2024

TIME: 6:00 PM – 7:00 PM

PLACE: Cobre Valley Recreation Center, 4877 Cypress Way, Miami, Arizona 85539

The purpose of this hearing is to discuss and comment on the Tri-City Regional Sanitary District's (TRSD) DRAFT 208 Plan Amendment to the CAG Section 208 Water Quality Management Plan. The hearing will address the identification of a new location for the proposed wastewater treatment facility that was approved in the previous plan amendment; expand the current DMA Boundary to include the parcel of the new location site; and approve the new discharge location point due to the new proposed location.

Upon completion, approximately 4,200 residents will directly benefit from this new wastewater collection and treatment system and the entire community will begin to see some environmental and economical improvements in the area. This project consists of the installation of 159,276+/- linear feet (LF) of gravity main lines, 27,500+/- LF of force main, approximately 415 new manholes, about 2,159 new service connections, and a newly constructed 0.50 million gallons per day (MGD) membrane bioreactor (MBR) WRF. Exhibit 2 Preliminary Collection & Treatment System (Appendix G) illustrates the proposed project phasing and infrastructure.

All generated domestic wastewater flows will be conveyed to the new TRSD WRF, which will be designed to have treatment capacity of 0.50 MGD at full buildout. The WRF will be owned, operated, and maintained by TRSD, and TRSD will be responsible for the effluent management. Written comments may be submitted to Steve Abraham (sabraham@cagaz.org) no later than 6:00 PM on Monday, June 24, 2024. A summary of the public comments received will be submitted as part of the Amendment Package to ADEQ for further consideration. Written and verbal comments are welcome at the Public Hearing. A copy of the Tri-City Sanitary District's DRAFT 208 Plan Amendment to the CAG Section 208 Water Quality Management Plan will be available for public review online on CAG's website www.cagaz.org. Hard copies can be reviewed starting the same time at the following locations:

- CAG Office – 2540 West Apache Trail, Suite 108, Apache Junction, AZ 85120 (7:00 AM to 6:00 PM, Monday through Thursday by appointment only)
- Miami Memorial Library – 282 S. Adonis Ave, Miami, AZ 85539 (10:00 AM – 6:00 PM, Tuesday-Friday; 9:00 AM – 1 PM Saturday)

If you have any questions or concerns between now and the hearing, please feel free to contact Steve Abraham by email or call 480-474-9300.

First Pub: 05-15-2024

Last Pub: 05-15-2024

LE1886

DRAFT

CENTRAL ARIZONA GOVERNMENTS

Public Notice

NOTICE OF PUBLIC HEARING ON THE TRI-CITY REGIONAL SANITARY DISTRICT'S CENTRAL ARIZONA GOVERNMENTS (CAG) SECTION 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT TO IDENTIFY A NEW LOCATION FOR THE PROPOSED WASTEWATER TREATMENT FACILITY THAT WAS APPROVED IN THE PREVIOUS PLAN AMENDMENT; EXPAND THE CURRENT DMA BOUNDARY TO INCLUDE THE PARCEL OF THE NEW LOCATION SITE; AND APPROVE THE NEW DISCHARGE LOCATION POINT DUE TO THE NEW PROPOSED LOCATION WITHIN GILA COUNTY, ARIZONA.

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(7:00 AM to 6:00 PM, Monday through Thursday by appointment only)
- **Miami Memorial Library** – 282 S. Adonis Ave, Miami, AZ 85539
(10:00 AM – 6:00 PM, Tuesday-Friday; 9:00 AM – 1 PM Saturday)

If you have any questions or concerns between now and the hearing, please feel free to contact Steve Abraham by email or call 480-474-9300.

Section 1.0 Public Hearing Notification: Public Notification Mailing List

Al Gameros: mayor@globeaz.gov; **City of Globe**

Jose (Angel) Medina Sr.: jamedinasr@gmail.com; **Town of Miami**

Tim Humphrey: thumphrey@gilacountyaz.gov; **Gila County Supervisor**

Paul Jepson: ptjepson@globeaz.gov; **City of Globe**

Alexis Rivera: townmanager@miamiaz.gov; **Town of Miami**

James Menlove: jmenlove@gilacountyaz.gov; **Gila County**

Jake Garrett: jgarrett@gilacountyaz.gov; **Gila County**

Darron Anglin: DAnglin@ajsewer.org; **SMCFD**

DRAFT

Section 2.0

Public Hearing Summary:

DATE: Monday, July 1, 2024

TIME: 6:00 PM – 7:00 PM

PLACE: Cobre Valley Recreation Center, 4877 Cypress Way Miami, Arizona 85539

CAG Staff Present:

Andrea Robles, Executive Director

Steve Abraham, Transportation/Water Quality Director

Travis Ashbaugh, CAG Employee

Applicant Representatives:

Robert Jaques, TRSD Board Member

Mike Krebs, TRSD Engineer/ Pacific Advanced Civil Engineering

Others: See sign in sheet attached.

Ms. Robles started the meeting at 6:10 P.M. She gave a brief introduction of CAG staff. She gave an overview of the process to describe the project and what the purpose of the amendment process was. She also stated that any comments to be considered part of the record must be written on the comment cards. She also included the display notifications at the sign in desk (attached).

Mike Krebs, PACE, gave a presentation (which is included in this exhibit). After his presentation Mr. Krebs asked if there were any questions.

An Unidentified Individual asked why this is being done. Mr. Ashbaugh gave a detailed history of the sewer planning in the area and how this request has evolved over time.

An Unidentified Individual asked why do we need this facility and why is it so expensive and are the sewer rates going to go up? Mr. Ashbaugh explained that this process is a technical review of the proposed facility. CAG has no impact on setting the monthly payments, fees usage rates or property taxes.

An Unidentified Individual asked how do you build a sewer plant in a wash/river? Mr. Krebs the applicant's engineer explained the permitting process to construct the facility.

An Unidentified Individual asked why the TSRD won't respond or address the issues of cost increases.

An Unidentified Individual stated why is a forty-year lien being placed on my property.

There was a general discussion between members of the audience about why the TSRD exists.

There was a general discussion of the approval process and the make-up of the CAG Regional Council.

Mr. Robert Jacques said he was available for questions and provided a brief description of why hooking into a regional facility like this is a good idea.

Gila County Supervisor Humphrey provided a statement as to why this plan is a good idea and his office would be coordinating a public outreach session to help address questions about the TRSD.

Mr. Ashbaugh reiterated that this process is a technical review of the proposed facility location. CAG has no impact on setting the monthly payments, fees, usage rates or property taxes.

An Unidentified Individual stated that he felt the amendment process wasn't being followed properly and that he wasn't notified of this public hearing and will be contacting the EPA to complain.

There was another general discussion of the approval process and the make-up of the CAG Regional Council.

An Unidentified Individual stated that she has had a cesspool her whole life and should be able to do whatever she wants on her property.

An Unidentified Individual said that this area is economically depressed and can't afford any of this.

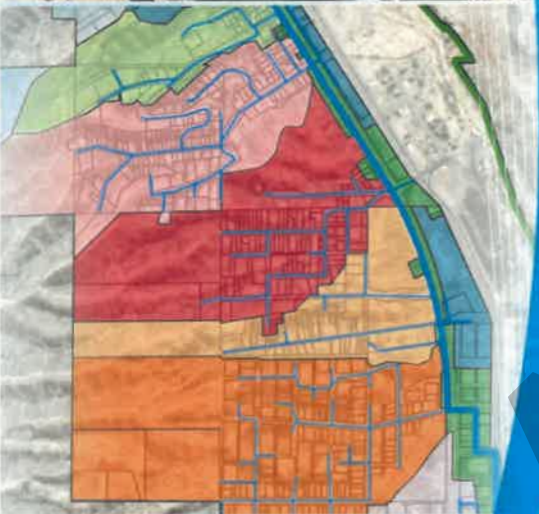
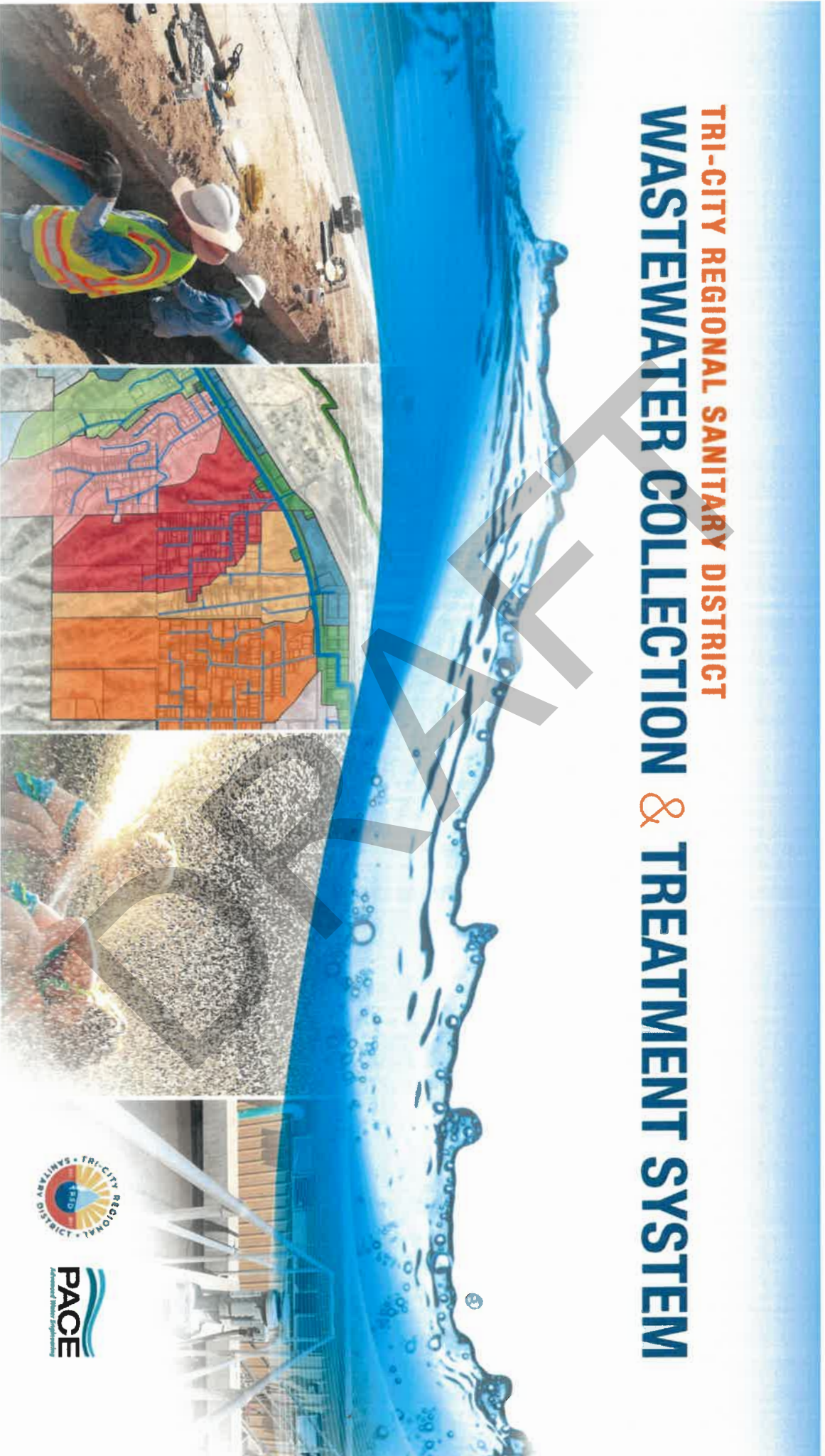
Mr. Ashbaugh Thanked everyone in attendance. He also stated that any comments to be considered part of the record must be written on the comment cards. He also included the display notifications at the sign in desk (attached).

The meeting concluded at 7:12 P.M.

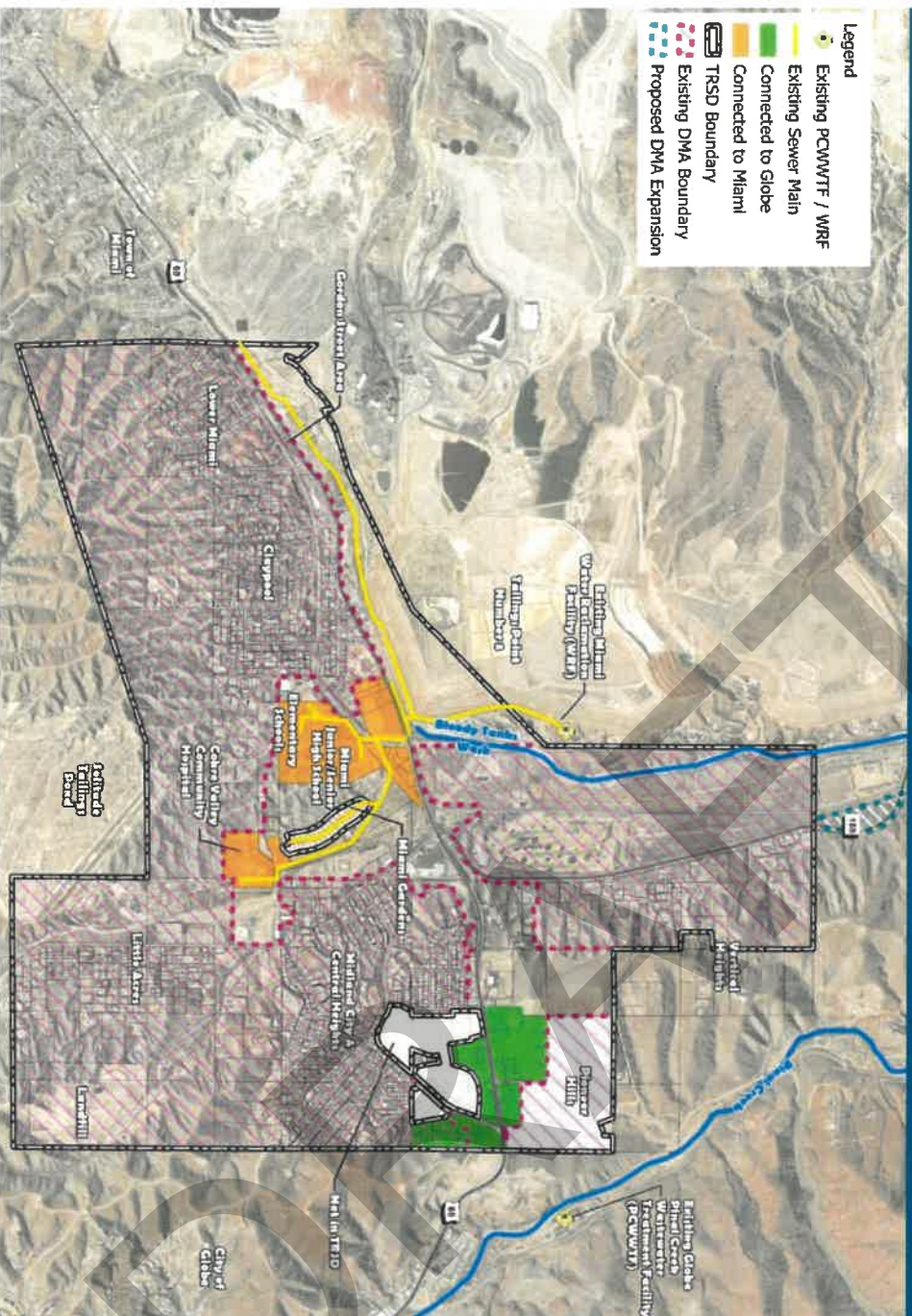
You will have 3 minutes to speak during the Public Comment Period. You must complete and submit a Public Comment card.

The Central Arizona Governments (CAG) does not have any influence on setting the monthly payments, usage and/or increased property taxes. CAG is in charge of the planning process and responsible for administering Section 208 of the Clean Water Act for Gila and Pinal Counties by conducting the public process for 208 amendments. CAG is responsible for technical reviews of wastewater facility plans, public participation, and technical assistance to local governments for water quality control issues.

TRI-CITY REGIONAL SANITARY DISTRICT WASTEWATER COLLECTION & TREATMENT SYSTEM

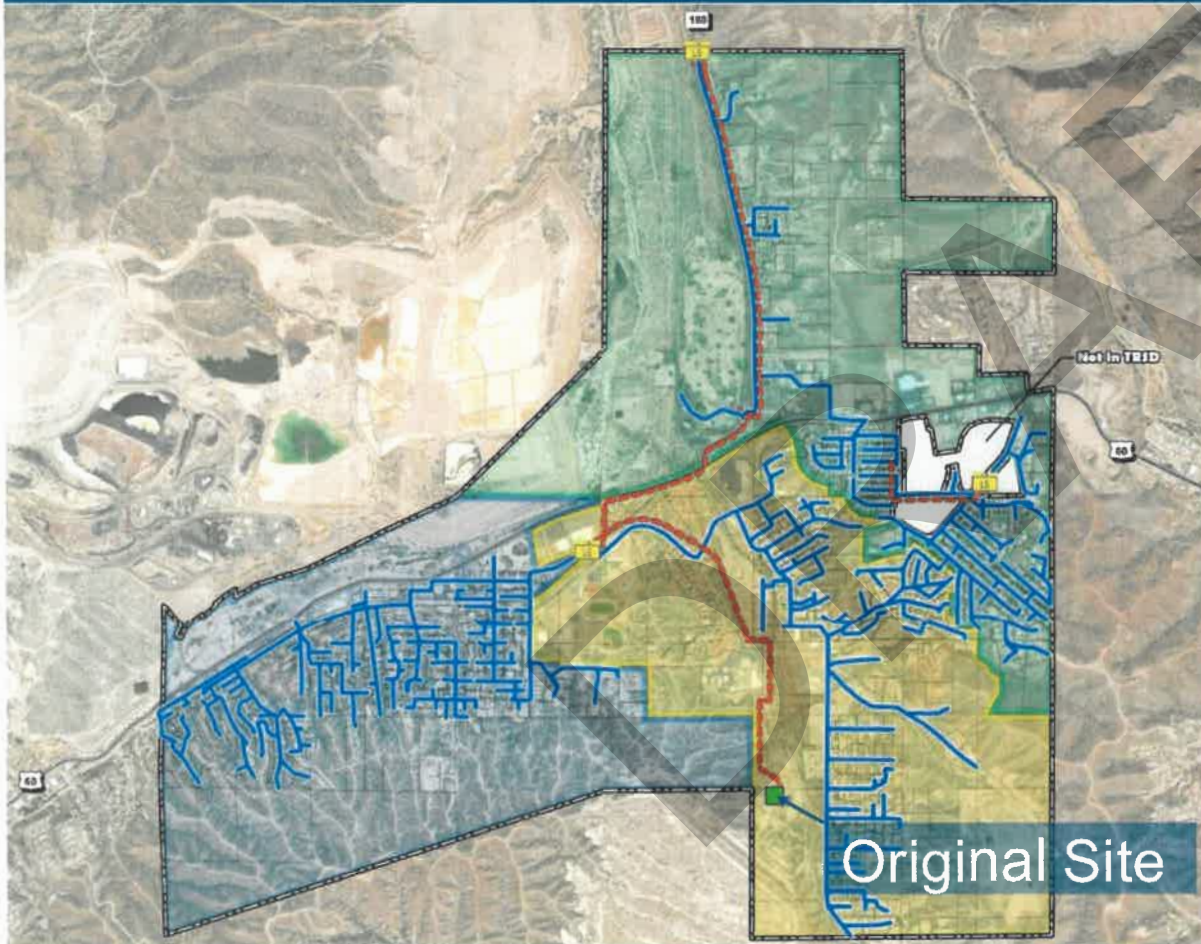


Tri-City Regional Sanitary District (TRSD) Wastewater Collection and Treatment System



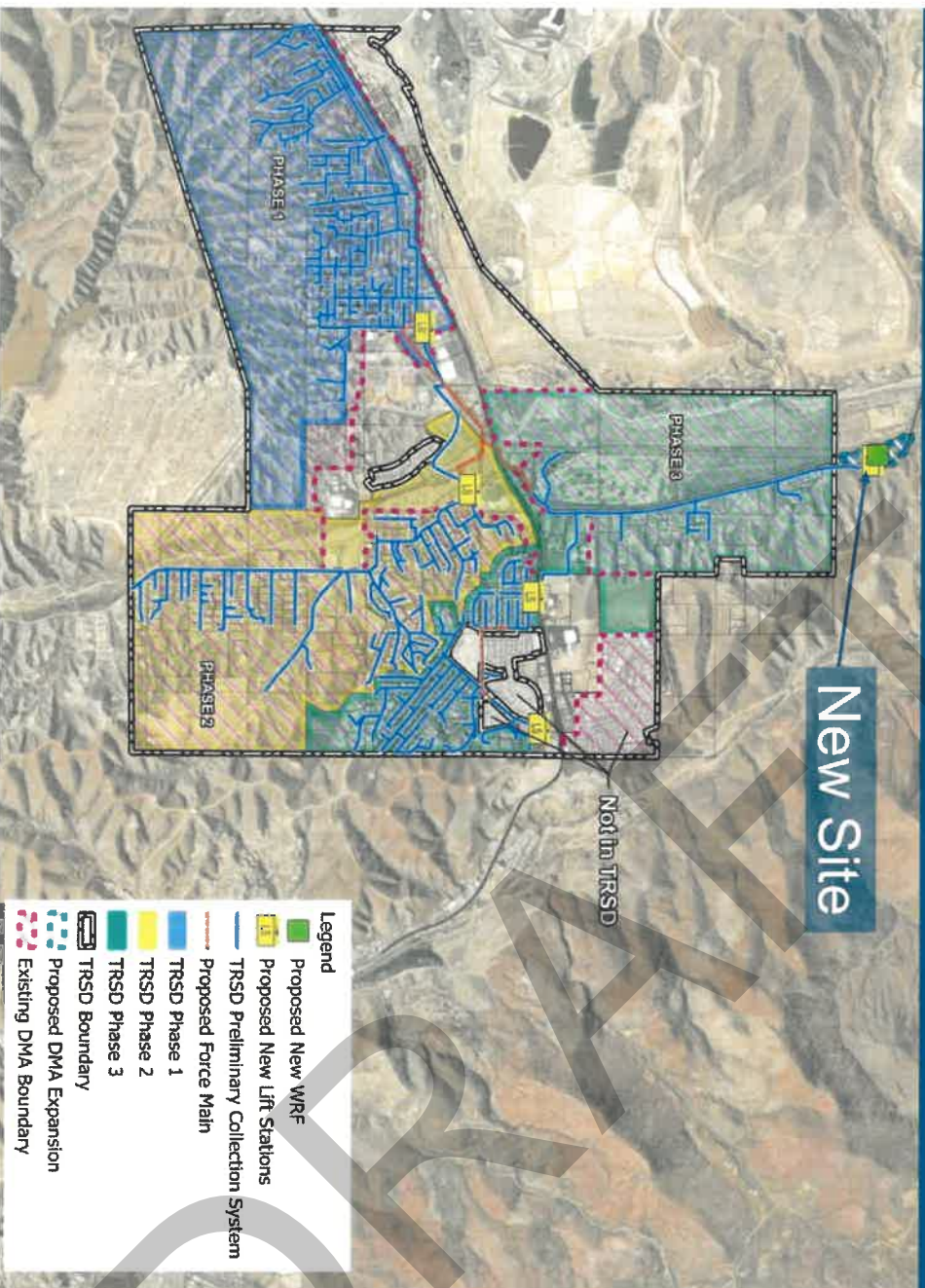
- CAG 208 ID# 2023-02
- Identify new WRF location
- Expand DMA boundary
- Approve new discharge location

TRSD Original WRF Site



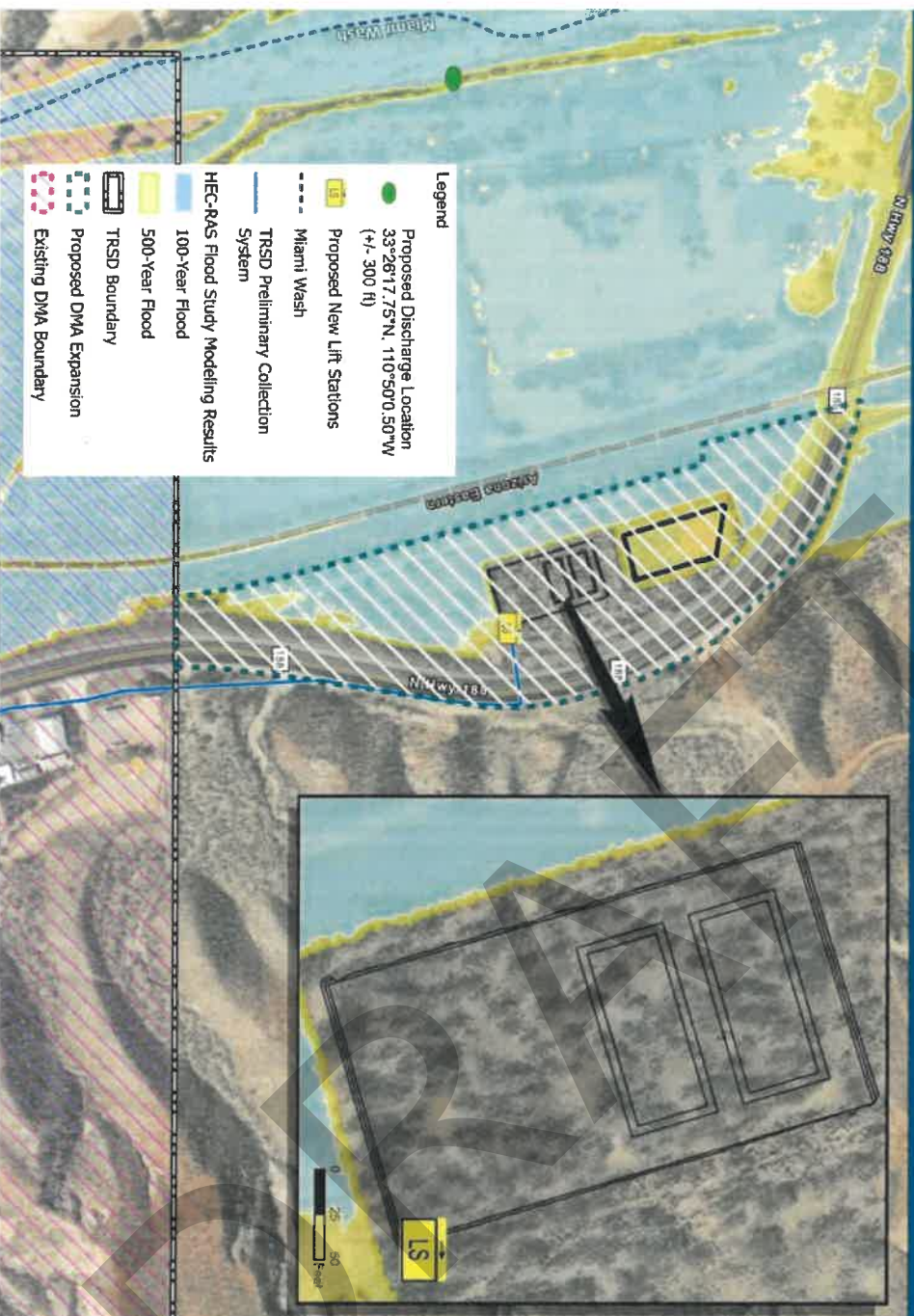
- 2018 PER & CAG 208 ID # 2017-02, original site offered by BHP
- Offer voided in 2019, due to Solid Tailings Dam changes
- Site acquired as donation to TRSD
- Site being added to 208 Amendment TRSD DMA
- Will make Phase 3 easier & reduce cost

TRSD New WRF Site



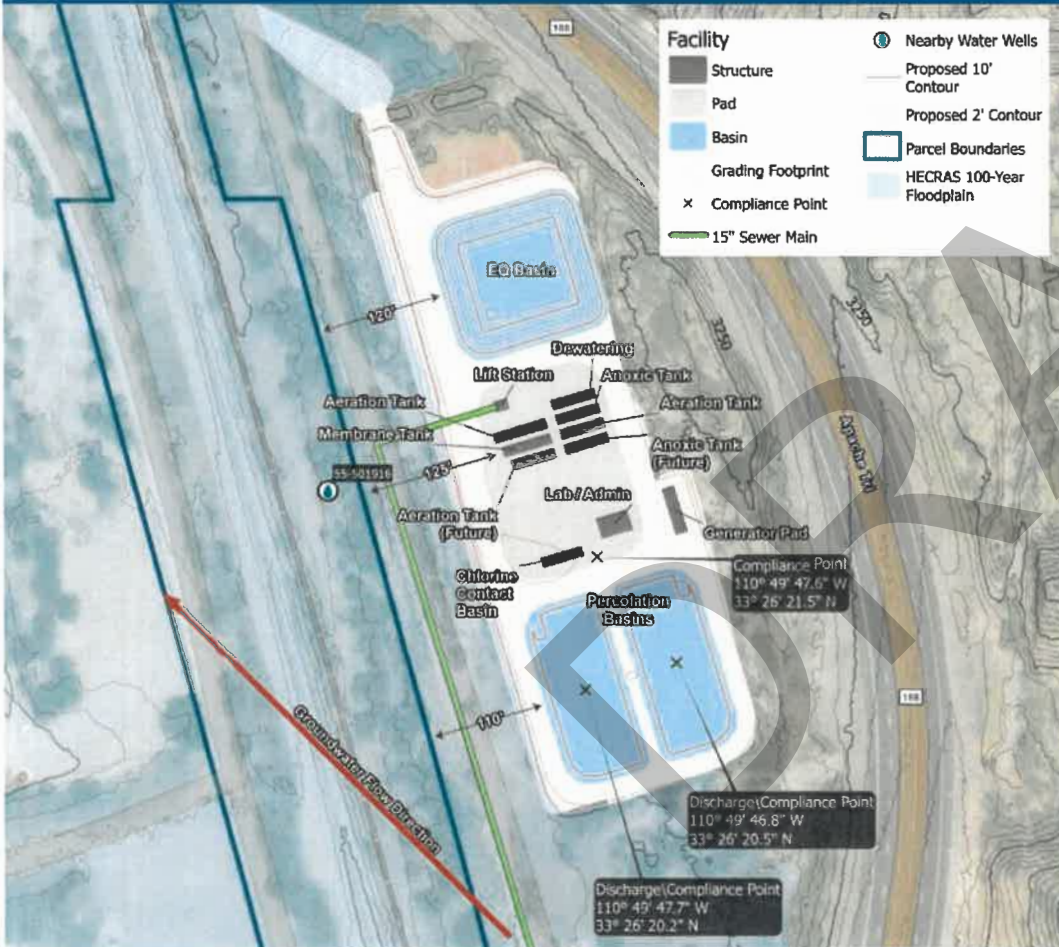
- Site acquired as donation to TRSD
- Site being added to 208 Amendment TRSD DMA
- Will make Phase 3 easier & reduce cost

TRSD WRF Site Floodplain Impact



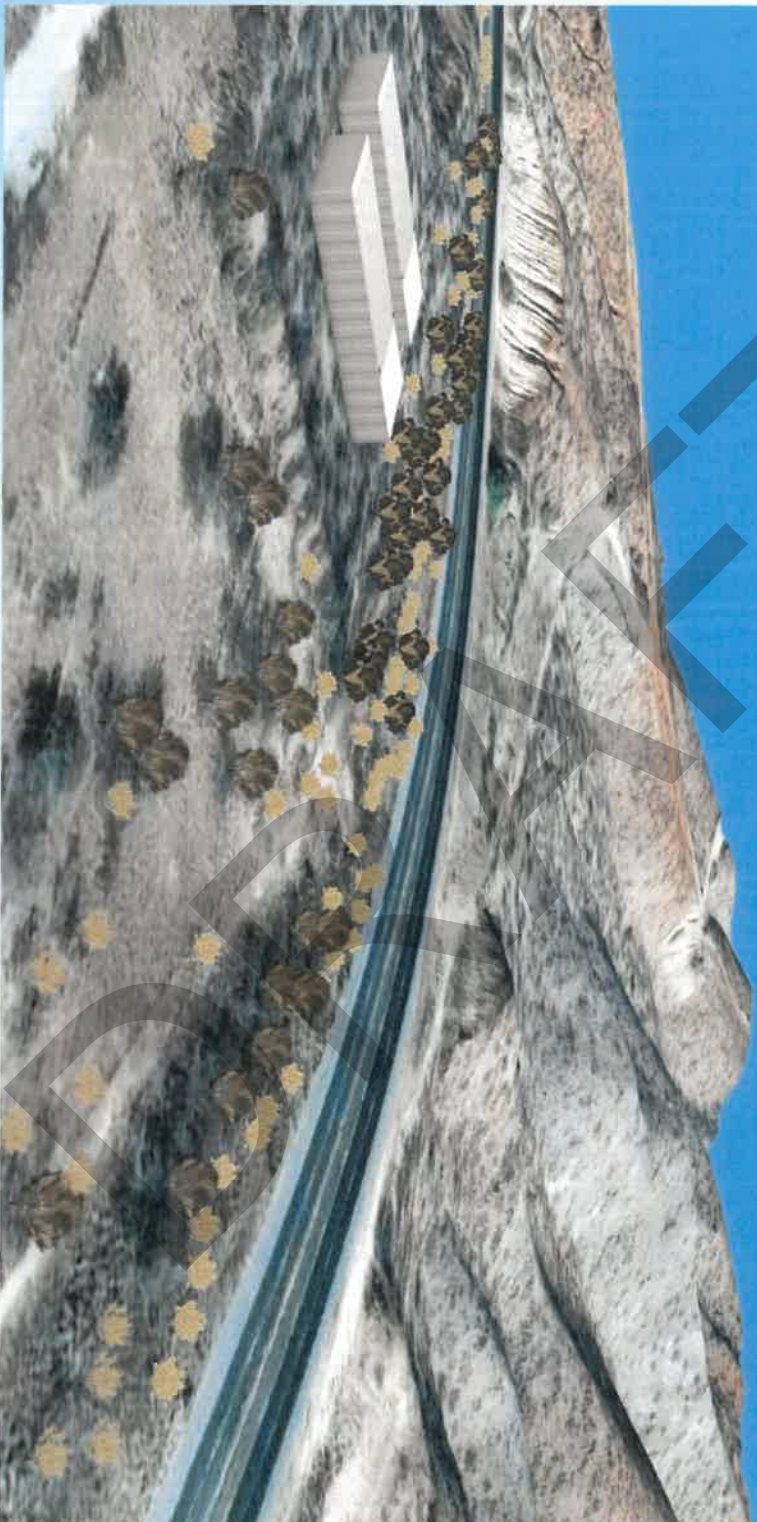
- Floodplain analysis done, will be designed to keep components out of floodplain determined no CLOMR / LOMR necessary)
- Gila County issued floodplain use permit
- 100% Reuse planned, discharge alt will be percolation basins
- 208 discharge point in future is needed

TRSD WRF Site Plan

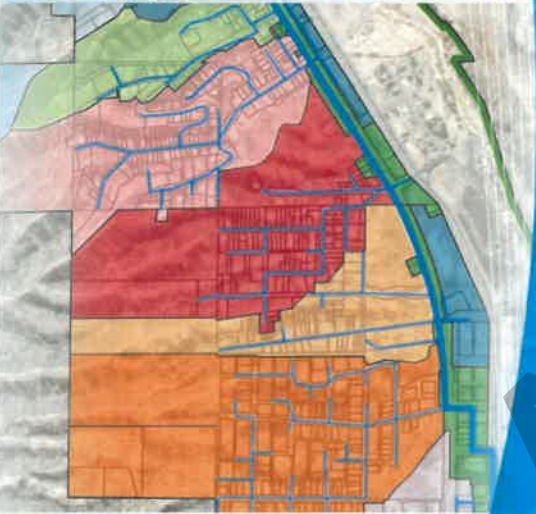
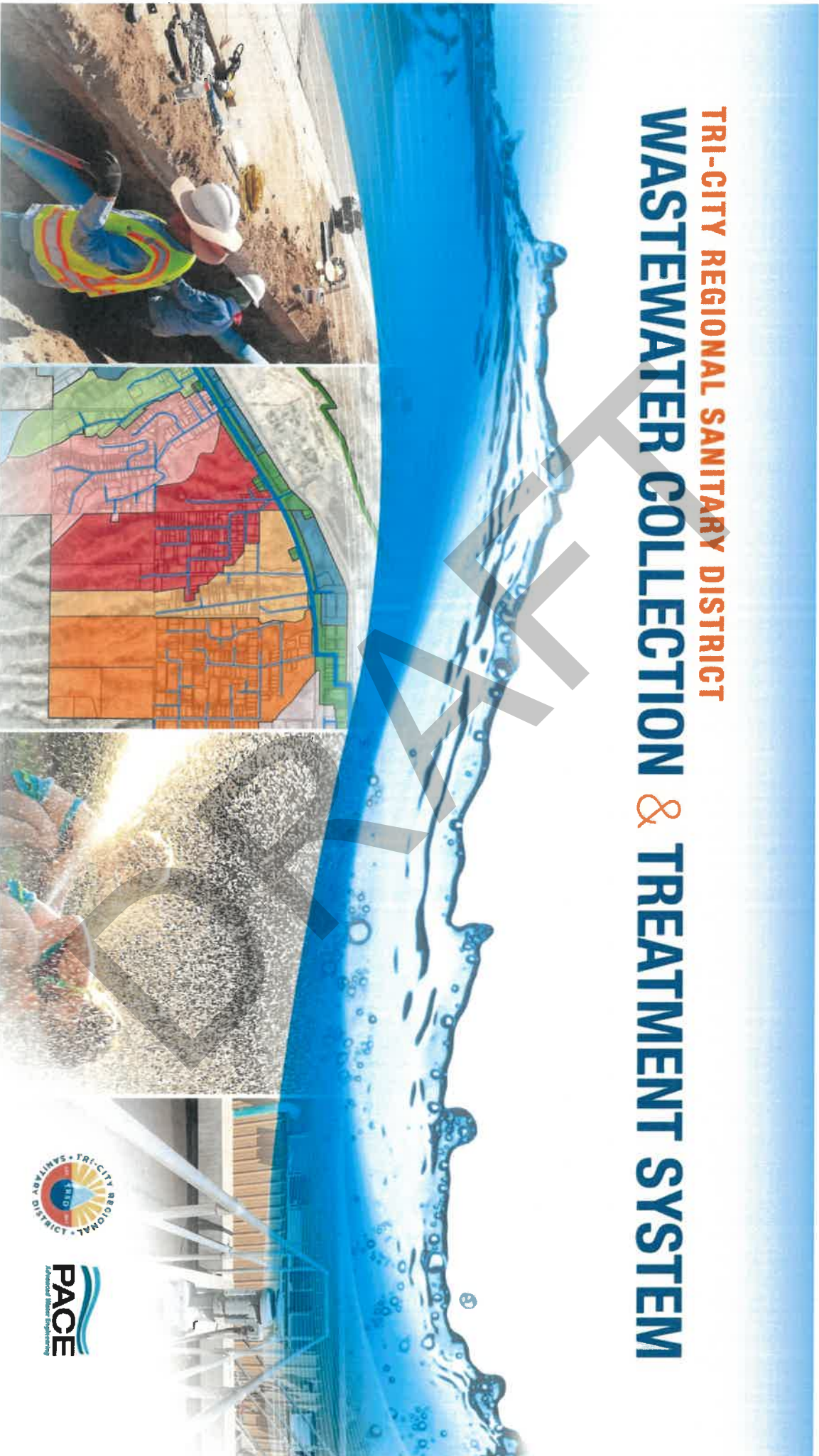


- Site is approximately 8 acres
- Portion used for development is outside of floodplain
- Gila County zoning change completed
- Has access to power, communication & water

TRSD WRF Flyover Video



TRI-CITY REGIONAL SANITARY DISTRICT WASTEWATER COLLECTION & TREATMENT SYSTEM





Tri-City Regional Sanitary District 208 Public Hearing

Cobre Valley Recreation Center

4877 Cypress Way - Miami, Arizona 85539

July 1, 2024 - 6:00pm

NAME	ADDRESS	PHONE	EMAIL
Mike Krebs	TUSD	480 991	mikkrebs@pacweb.com
Robert Mann	5272	928 200 4335	
JERRY ROCHA	5651 S. BURHAM ST.	(928) 812-1163	jrochaff31@yahoo.com
Reena & Orlando Guerrero	HSAFMA 6054 S. El Camino Claypool, AZ 85532	928-701-3384	rag4of5@gmail.com
Alexis Qui	931 S. Maple Valley Dr. Globe	928.961.1303	
FRED BARCON	Globe, AZ 85508 7302 Adobe 5964 Short Ave	928 812-0546	Fred @ barconcorp.com
Les Henderson	Globe, AZ		
TERRY SHOGART	5332 E. GOLDEN HILL		
DOUG SHOGART	GLOBE	520-360-4087	
Manuel (Casita)	Globe	928-275-0448	
Jeanne Jacques	Claypool	928-473-1140	
R.B. Jacques	Claypool	512.468.6957	
Ryan Cluff	wheatfields		rcluff@gilacountyaz.gov
Jake Garrett	Payson	928 701-1669	jgarrett@gilacountyaz.gov
Monica Munn	Country Club Mgmt 1541 Rose Ave. MI 85539	928 200-4910	mgnm-star@yahoo.com
Wayne Wampole	5472 Randa II Globe AZ	928-200-1415	wwampole@hotmail.com
PAUL JEPSON	150 N. PINE ST GLOBE AZ.	602 672 6024	PTJEPSON @ GLOBE.AZ.GOV
Tim Humphrey	GOLDEN HILL	928-961-2845	



Tri-City Regional Sanitary District 208 Public Hearing

Cobre Valley Recreation Center

4877 Cypress Way - Miami, Arizona 85539

July 1, 2024 - 6:00pm

NAME	ADDRESS	PHONE	EMAIL
Jokee Stannart	5420 E Pinal Cyn Rd Globe AZ 85501	928-812-4006	jstannart@gmail.com
Territ. Cook	5851 S. El Camino Miami, AZ 85535	928 250-9187	Iamtlc1961@aol.com
Bobby Rooks	5639 S Russel	719-429-8251	rooks_bobby@yahoo
Suzanne Sawyer	5922 E Scott AV	928-200-6420	hey_suz61@yahoo.com
Lucia Medina	5609 W Pine Ave Miami, AZ	928-200-1356	mlmedina@gmail
Jose Angel Medina Sr	269 N. Pine Ave Miami, AZ 85530	928-200-0820	jamedinasr@gmail.com
MARK HATCHLEY	P.O. Box 83839 488 Taylor Ave	928 242 7186	
Melvin Warby	160 Del Rio Globe, AZ	928 200 2418	Melvin Warby
Nancy Boghman	6025 S. Russell Rd Globe, AZ	928-200-9322	Nancy Boghman
Terry Phillips	5310 E. Golden Hill Rd	928-200-8171	TRP2538@yahoo.com
Maria Maria	5685 S McKinnis 5419	928-812-5567	mesiamary6@gmail
HARLEY FARESTER	HANCASTER ST	928 812 0335	
DALTON FARESTER	5987 Short Ave		
Dana Hayes	6090 Obscure Way 600	928-301-6248	
John Stapleton	Obscure Way	503-580-6495	John Stapleton
Tom Werner	5496 Woodward St.		

Central Arizona Governments
Public Comment Card

This comment card will become public record
and will be included in the 208 Amendment.

NAME

Terr. L Cook

ADDRESS

5851 S. El Camino

EMAIL

Iamtlc1961@aol.com

PHONE NUMBER

928-250-9187

COMMENT

- * I'm trying to understand how a community below poverty is expected to carry this burden when all you have to do is drive around and see how many homes that need improvement made to them desparately!
- * I'm trying to understand why a legitamate vote was not proved for our community as a package with requests for documents proving residency is not a in depth explanation to home owners who "Many don't Drive" and or are "Elderly"
- * Why have we not received an itemized list of costs and total amounts each home owner will be responsible for! What will the monthly fees be on top of usage fees P??
- * Why are we responsible for the a clean that we are not share holders?
- * Why are TRSD Members so Condensending to we the home owners?

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME Jolee Stanneart

ADDRESS 5420 E Pinal Cyn Road, Globe, AZ, 85501

EMAIL jstanneart@gmail.com

PHONE NUMBER 928-812-4006

COMMENT

This project will be a financial disaster for the 1,400 people in this community. I live on Bechtel tract and I already have a sewer system and TRSD wants me to pay for something that I already have. There is no transparency within the TRSD board members or their consultants. People in this community cannot afford this project and it will become a financial hardship for them. This meeting was not publicized enough so that property owners were aware of it. The 208 amendment was written on September 2023 and TRSD has NEVER mentioned in the past nine months at any meeting. There has to be a cheaper way for this to work. Bechtel tract already has sewer lines that BAP paid for and I will be required to pay for again. There has never been a legitimate vote taken but TRSD states that they have 75% of property owners behind them - not is not a true statement. Contacted my supervisor Jim Humphrey with questions and he never responded but turned questions over to TRSD - which took 4 months to answer.

Why is a third plant needed for a poor community?
Why am I having to pay for a system that I already have? Does TRSD have the appropriate permits?

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME *FRED BARCON*

ADDRESS *8152 Electric Drive, Globe, Az 85305*

EMAIL *fred@barconcorp.com* PHONE NUMBER *928-812-0546*

COMMENT *I have been involved in this project since 2010. I was also instrumental in securing funding for Miami Waste system. The TRSD Board has been very closed about sharing information. I also am contending that the so called protest vote was not conducted as per ARS. The handling of protest were also not handled or counted by a state certified team. The TRSD Present Board does not represent 95% of the property owners. Property owners were not told all the conditions and consequences of the protest. Additionally PACE Engineers was not certified to "count" votes. Additionally, TRSD former President Bob Zach, living in Miami Gardens was not authorized to hold office*

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME

Thomas Werwer

ADDRESS

5996 Woodward St

EMAIL

PHONE NUMBER

COMMENT

ARE THE RESIDENTS STAKEHOLDERS

DRAFT

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME

SUZANNE SAWYER

ADDRESS

P.O. Box 147 Claypool, AZ 85532

EMAIL

heyguzel@yahoo.com

PHONE NUMBER

928-200-6920

COMMENT

Why are feeling the bill.
Gotta be a better way.
how can city of globe say this is okay

DRAFT

Central Arizona Governments
Public Comment Card

This comment card will become public record
and will be included in the 208 Amendment.

NAME

HARLEY FARESTER

ADDRESS

5419 GLOBE AZ

EMAIL

EDFARESTER@YAHOO.COM

PHONE NUMBER

928-812-0835

COMMENT

TRSD NO OFFICE IN DISTRICT

HOW MUCH IS IT COSTING PHASE 1
#12,000,000 40 YRS. NO ANSWERS
14 YRS. HOW MANY PARCELS

GLOBE, MIAMI HAVE SYSTEMS LOOK
AT EMPTY BUILDING

COBRA VALLEY & PINAL VOTED &
TURNED DOWN
NO OFFICE IN DISTRICT
NO ANSWERS

TIM ~~RE~~ NEEDS SYSTEM WHERE
HE LIVES FEED THE FISH

LAND
PARCELS

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME

Jose Angel Medina Sr.

ADDRESS

269 N. Pine Ave, Miami, AZ 85539

EMAIL

jamedinasr@gmail.com

PHONE NUMBER

928-200-0820

COMMENT

Past History issue

DRAFT

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME

Melvin Warkington

ADDRESS

160 Del Rio Lane Globe

EMAIL

PHONE NUMBER

929 200 2418

COMMENT

Like to Ask about Flood Plan
& Water Level

DRAFT

**Central Arizona Governments
Public Comment Card**

*This comment card will become public record
and will be included in the 208 Amendment.*

NAME *Manuel Orcasitas*

ADDRESS *5435 E. Hsie St # 6*

EMAIL *sonnyoela@gmail.com*

PHONE NUMBER *928-275-0486*

COMMENT

DRAFT

DRAFT



Environmental Planning Committee
(EPC) Meeting Agenda

DATE: March 5, 2024

TIME: 9:00 a.m.

LOCATION: CAG Conference Room | 2540 West Apache Trail, Suite 108, Apache Junction, Arizona 85120

VIRTUAL OPTION: ZOOM Webinar -

<https://us02web.zoom.us/j/87032448188?pwd=WW9nYXRJUENHUHdPQIJXTVpVdVIUdz09>

ID NO: 870 3244 8188

PASSWORD: 399459

CALL-IN #: 1 (877) 853-5257

I. Call to Order – Chair Darron Anglin

II. Pledge of Allegiance

III. Roll Call & Introduction of Guests

IV. Approval of Minutes – (November 29, 2023)

P – F – T

V. Call to the Public *(Members of the public may speak on any item not listed on the agenda. Items presented during the Call to the Public portion of the Agenda cannot be acted on by the Environmental Planning Committee (EPC). EPC members may ask questions of the public but are prohibited by the Open Meeting Law from discussing or considering the item among themselves until the item is officially placed on the agenda. Individuals are limited to a two-minute presentation. For the sake of efficiency, the Chair may eliminate the Call to the Public portion of any agenda.)*

VI. New Business

A. City of Coolidge CAG 208 Plan Amendment (CAG ID # 2021-01)

P – F – T

B. Tri-City Regional Sanitary District 208 Plan Amendment (CAG ID # 2023-02) (Advance to Public Hearing)

P – F – T

C. Updates on DRAFT 208 Plan Amendments in Progress

Info.

D. Round Table

Info.

E. Future Agenda Items

Discussion

VII. Scheduling of Next Meetings – TBD

Info.

VIII. Adjournment

Approved by

(Andrea Robles, CAG Executive Director)



Environmental Planning Committee

November 29, 2023 Meeting Minutes

DATE: November 29, 2023

TIME: 10:00 a.m.

LOCATION: CAG Conference Room | 2540 West Apache Trail, Suite 108, Apache Junction, AZ 85120
Virtual Option via Zoom

MEMBERS PRESENT:

Darron Anglin – *Chair*
(Apache Junction/SMCFD No. 1)

Jake Garrett – *Vice Chair*
(Gila County)

Rick Miller
(Coolidge)

Matt Rencher
(Eloy)

Kevin Louis
(Casa Grande)

Vince Mariscal
(Globe)

Alexis Rivera
(Miami)

Chris Jones
(U of A Coop. Extension)

MEMBERS ABSENT:

Mike Osborne
(Marana)

Keith DeVore
(Queen Creek)

Keith Loomis
(Maricopa)

Atul Shah
(Pinal County)

Ron Grittman
(Florence)

Robert Jacques
(Tri-City Regional Sanitary District)

Tanner Henry
(Payson)

GUESTS PRESENT:

Ben Navarro
(Coolidge)

Gilbert Lopez
(Coolidge)

Kim Owensby
(Casa Grande)

David Malewitz
(Eloy)

Graham Symmonds
(Global Water Resources)

Freddy Alvarez
(Global Water Resources)

Mike Saunders
(Orenco Systems)

Mark Schaefer
(Orenco Systems)

Bryan Chiordi-Jones
(Orenco Systems)

Robert Archer
(Westland Resources)

John Calkins
(EPCOR)

CAG Staff:

Travis Ashbaugh
(Transportation/Water Quality Planning
Director)

Angela Gotto
(Administrative & Special Projects
Coordinator)

I. Call to Order

Chair Anglin called the meeting to order at 10:01 AM.

II. Pledge of Allegiance

Chair Anglin led the Committee in the Pledge of Allegiance.



Environmental Planning Committee

March 5, 2024 Meeting Minutes

DATE: March 5, 2024

TIME: 10:00 a.m.

LOCATION: In Person/Via ZOOM Webinar

MEMBERS PRESENT:

Darron Anglin – <i>Chair</i> <i>(Apache Junction/SMCFD No. 1)</i>	Jake Garrett – <i>Vice Chair</i> <i>(Gila County)</i>	Vince Mariscal <i>(Globe)</i>
Atul Shah <i>(Pinal County)</i>	Mike Osborn <i>(Marana)</i>	Chris Jones <i>(U of A Coop. Extension)</i>
Robert Jacques <i>(Tri-City Regional Sanitary District)</i>	Alexis Rivera <i>(Miami)</i>	Robert Jacques <i>(Tri-City RSD)</i>

MEMBERS ABSENT:

Ron Grittman <i>(Florence)</i>	Rick Miller <i>(Coolidge)</i>	Kevin Louis <i>(Casa Grande)</i>
Keith Loomis <i>(Maricopa)</i>	Keith DeVore <i>(Queen Creek)</i>	Matt Rencher <i>(Eloy)</i>
Gordon Dimbat <i>(Payson)</i>	Chris Montegue-Breakwell <i>(ADEQ)</i>	

GUESTS PRESENT:

Michael Krebs
(Pace Water)

Pauline Higginbotham
(Pinal County)

Zack Tate
(Coolidge)

Robert Archer
(Westland Resources)

Ryan Cluff
Gila County

Ben Navarro
City of Coolidge

CAG Staff:

Andrea Robles
(CAG Executive Director)

Travis Ashbaugh
(Water Quality Planning Director)

I. Call to Order

Chair Anglin called the meeting to order at 9:05 AM.

II. Pledge of Allegiance

Chair Anglin led the Committee in the Pledge of Allegiance.

III. Roll Call & Introduction of Guests

Roll call was taken. Ten (10) voting members were present, constituting a quorum as established by the CAG EPC Bylaws.

IV. Approval Of Minutes – (November 29, 2023)

Mr. Garrett made the motion to approve the November 29, 2023, minutes as presented. Mr. Rivera seconded the motion. The motion passed unanimously.

V. Call to the Public

No one answered the call to the public.

VI. New Business

A. City of Coolidge CAG 208 Plan Amendment (CAG ID # 2021-01)

Mr. Ashbaugh provided a brief history of the amendment. Ms. Robles introduced Mr. Archer, WestLand Engineering & Environmental Services, who provided an overview of the City of Coolidge CAG 208 Plan Amendment. He stated the plan is to serve three purposes: 1) To expand the current Designated Management Agency (DMA) Boundaries for the City of Coolidge; 2) Increase the Build-Out capacity of the Central Wastewater Treatment Plant (WWTP) to 36.5 million gallons per day (MGD); 3) Plan for the future Airport Water Reclamation Facility (WRF) with a Build-Out capacity of 11.0 MGD.

Mr. Archer informed the Committee that the City is requesting to expand their current DMA boundary by an additional 66.4 square miles for a total 156.8 square miles, which also expands the City's Service Area boundary, and to increase the current approved Build-Out capacity of the Central WWTP, located at 1595 West Coolidge Avenue, Coolidge, Arizona 85128, from 12 MGD to 36.5 MGD. He shared that the future Airport WRF will serve future development within a defined portion of the City's proposed DMA boundary.

Mr. Ashbaugh stated that the City of Coolidge has demonstrated that it meets the legal, financial, and technical capabilities to carry out water quality planning as a Designated Management Agency (DMA) as described within the CAG 208 Water Quality Management Plan.

Mr. Ashbaugh stated that a public hearing was held on January 30, 2024. No public comments were received. Questions, comments and discussion followed. Mr. Grittman made the motion to approve the City of Coolidge 208 plan. Mr. Rivera seconded the motion. The motion passed unanimously.

B. Tri-City Regional Sanitary District 208 Plan Amendment

Mr. Ashbaugh provided a brief history of the amendment, location and need for a public hearing. In October 2023, a stakeholders meeting was held, Letters of Support/No Objection were collected from all agencies. The appeals process was completed. Mr. Ashbaugh stated that the Town of Miami's concerns were addressed over a 90-day period. The Town of Miami has submitted a Letter of Support. Mr. Krebs, Pace Water, provided an overview of the amendment on behalf of Tri City Sanitary District. Mr. Ashbaugh stated that CAG is requesting approval to move forward with a public hearing. Questions, comments, and discussion followed. Mr. Miller made the motion to approve the scheduling of a public hearing for the Tri-City Regional Sanitary District 208 Plan Amendment. Mr. Mariscal seconded the motion. The motion passed unanimously.

C. Updates on DRAFT 208 Plan Amendments in Progress

Mr. Ashbaugh provided a status update on 208 Amendments in review.

D. Round Table

Member entities that were in attendance provided updates to attending members.

E. Future Agenda Items

No future agenda items were discussed.



VII. Meeting Scheduling of Next Meeting

TBD

VIII. Adjournment

Mr. Garrett made the motion to adjourn the EPC meeting. Mr. Cruce seconded the motion. The motion passed unanimously. The meeting was adjourned at 11:40 AM.