CAG 208 WATER QUALITY MANAGEMENT PLAN (2016) 208 PLAN AMENDMENT

CAG 208 ID #2017-03

for

TOWN OF QUEEN CREEK, ARIZONA

DMA EXPANSION

TOWN OF QUEEN CREEK, ARIZONA
22350 SOUTH ELLSWORTH ROAD
QUEEN CREEK, ARIZONA 85142
480-358-3000

September 20, 2018

Prepared by

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Adopted by the CAG Regional Council: XXXX

This plan supersedes the Town of Queen Creek's 2007 CAG 208 Amendment (CAG 208 ID# 2007-03)

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List of Acronyms & Definitions List

208 Plan	A regional water quality management plan developed in accordance with Section 208 of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500; a.k.a the "Clean Water Act).
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
APP	Aquifer Protection Permit. A state permit required to discharge a pollutant to an aquifer or to the land surface if reasonable probability that the pollutant will reach an aquifer.
ASLD	Arizona State Land Department
AzGS	Arizona Geologic Survey
AZPDES	Arizona Pollutant Discharge Elimination System. A state permit required to discharge pollutants to a surface water. ADEQ was delegated the federal NPDES permitting program in December 2002.
bls	Below land surface
BNR	Biological Nutrient Removal
CAG	Central Arizona Governments
Capacity	See constructed capacity, design capacity, APP approved capacity, and capacity assurance.
Capacity Assurance	Assurance given in writing to a developer that a wastewater treatment plant has sufficient permitted capacity to accept wastewater from a proposed development. Capacity assurance cannot exceed 100% of the capacity approved in the APP; Capacity assurance is required for subdivisions and other APP 4.01 General Permits if estimated combined design flow is more than 3,000 gpd.
CFR	Code of Federal Regulations
CWA	Clean Water Act (Federal Water Pollution Control Act Amendments of 1972 [P.L. 92-500]).
Design Capacity	The engineered design flow capacity of a facility of a facility in an approved 208 Plan.
Design Flow	Daily flow rate a facility is designed to accommodate on a sustained basis while satisfying all APP discharge limitations, treatment, and operational requirements. It incorporates peaking and safety factors to ensure sustained and reliable operation. Operationally, it is the estimated daily flow from discharges to the plant, based on number and types of connections.
DMA	Designated Management Agency. A local government subdivision that is certified by the ADEQ as having adequate resources and capabilities to design, operate, and maintain wastewater facilities and the desire to implement portions of the CAG 208 Plan. (See also Wastewater Management Utility)
DPA	Designated Planning Agency. The regional or state agency responsible for overseeing 208 planning. Central Arizona Governments (CAG) is the DPA for Pinal and Gila Counties.
DU	Design unit
EPA	U.S. Environmental Protection Agency

EPC	Environmental Planning Committee
Feasible	Relating to **Table 5.1 Wastewater Treatment Options**, economical, physical, and technological constraints established in APP and AZPDES Rules are considered.
Flow	See operational flow, design flow, and AZPDES discharge limit
gpd	Gallons per day
gpm	Gallons per minute
Goal	Within a strategic plan, a goal is the desired outcome in broad and inclusive terms.
GSF	Groundwater Savings Permit
GWRP	Greenfield Water Reclamation Plant
IGA	Intergovernmental Agreement; A formal agreement between two or more government agencies.
LTSC	Long Term Storage Credit
MAG	Maricopa Association of Governments
MCL	maximum contaminant level
MGD	Million gallons per day
Objective	In a strategic plan, the broad changes needed to achieve a goal.
On-Site Wastewater Treatment System	A conventional septic tank system or alternative system installed to treat and dispose of wastewater predominantly of human origin, generated at the site.
Operational Flow	The maximum monthly average measured flow into a wastewater treatment plant, based on the last 12 months of flow.
Planning Area	For a WMU, the PLANNING AREA is anything beyond their Certificate of Convenience and Necessity (CC&N) used for planning coordination efforts with no exclusive rights granted. For a DMA, the PLANNING AREA is the DMA boundary.
Reclaimed Water	Sewage that has been treated by wastewater treatment plant or on-site wastewater treatment facility.
RWCD	Roosevelt Water Conservation District
Septic System	A type of on-site wastewater treatment system usually composed of a septic tank and a leaching system. Also referred to as a conventional system.
Service Area	For a WMU, the SERVICE AREA is their Certificate of Convenience and Necessity (CC&N). For a DMA, the SERVICE AREA is the boundary of the existing collection system.
Sewage	Untreated wastes from toilets, baths, sinks, lavatories, laundries, and other plumbing fixtures, and waste pumped from septic tanks (See also GREY WATER).
Sewage Collection System	A system of pipelines, pumping stations, and other structures and devices to collect and convey sewage to the sewage treatment facility or an on-site wastewater treatment facility serving more than a single-family dwelling.
Sewage Treatment Facility	A wastewater treatment plant or system and its disposal works. This facility definition excludes an on-site wastewater treatment facility, a sewage collection system, or reclaimed water distribution system. (See also TREATMENT WORKS).
Strategy	In a strategic plan, the specific actions needed to accomplish an objective or goal.
TAZ	Transportation Area Zone
Town	Town of Queen Creek

Treatment Works	A plant, device, unit process, or other works used for treating, stabilizing, or holding municipal or domestic sewage in a sewage treatment facility or on-site wastewater treatment facility (Broad and inclusive term used for wastewater treatment facilities).
Wastewater Management Utility	A privately-owned centralized wastewater treatment facility and a collection system that provides services to multiple properties and may expand these services or facilities in the future. To be a WMU, ADEQ must certify that the entity has the resources, capability, and desire to function as a DMA.
WIFA	Arizona's Water Infrastructure Finance Authority, a state program for grants and loans for construction of wastewater and drinking water facilities.
WWTP	Wastewater treatment plant

SECTION 1.0

1 Introduction

1.1 Abstract

The Town of Queen Creek is proposing to expand its Central Arizona Governments (CAG) Designated Management Agency (DMA) boundary approximately 9.7 square miles by submitting this CAG 208 Water Quality Management Plan (CAG 208 Plan Amendment). Figure 1-1 illustrates the proposed CAG DMA boundary expansion for the Town of Queen Creek, the current DMA boundaries within CAG and the Maricopa Association of Governments (MAG), as well as the Town's current General Plan boundary. This CAG 208 Plan Amendment request is only for an expansion of the current CAG DMA boundary. Any changes to the MAG DMA boundary would need to be filed within MAG's 208 planning process.

In 2007, the CAG Regional Council approved the Town of Queen Creek's request to establish a DMA within the CAG Region. This CAG 208 Plan Amendment includes an overview of the Town's 2007 request and will be referred to as the "current CAG DMA boundary." Pending approval, this CAG 208 Plan Amendment will expand on the 2007 CAG DMA boundary and therefore supersede the previous Amendment (CAG ID # 2007-03). Once the CAG DMA is officially expanded, the Town of Queen Creek's Council will serve as the Board of Directors to administrate the expanded and current CAG DMA.

The proposed CAG DMA boundary expansion is located in Pinal County and includes mostly Arizona State Lands with the remaining lands being held privately. Currently, no wastewater is being treated within the State Lands portion as it is undeveloped desert. The privately held lands are currently treating their wastewater through septic systems. The Town of Queen Creek will collect and treat the future wastewater from the State Lands portion once it is developed into their current collection system.

The Town of Queen Creek processes all its collected wastewater at the Greenfield Water Reclamation Plant (GWRP) located in the Town of Gilbert in Maricopa County. The GWRP is operated by the City of Mesa and the plant is co-owned by the Town of Gilbert, the Town of Queen Creek, and the City of Mesa. The GWRP currently has 16.0 million gallons per day (mgd) of treatment capacity and produces A+ effluent. There are no plans to change the effluent quality, and doing so would need to be processed through MAG's 208 planning process.

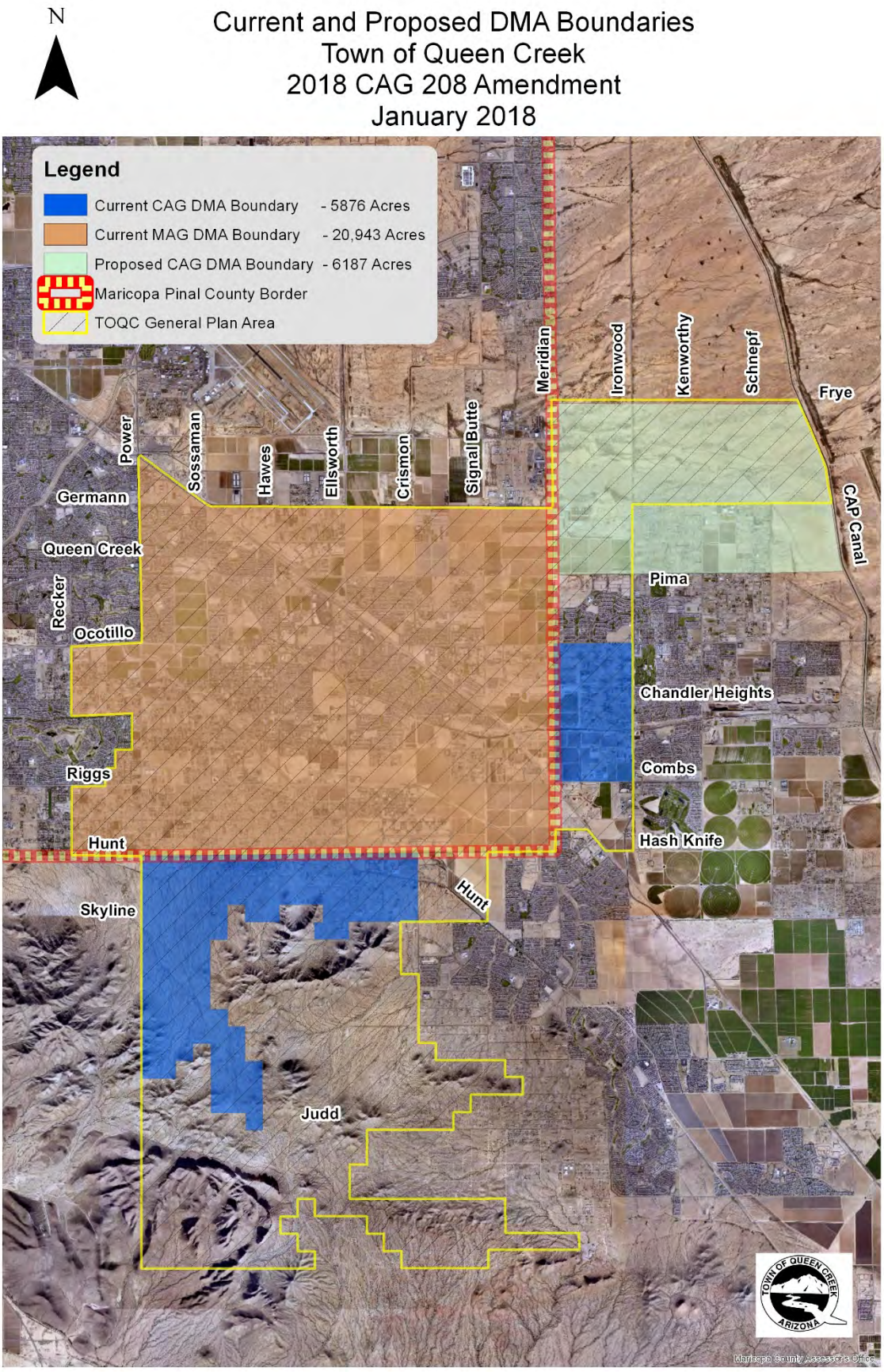

Figure 1-1 Town of Queen Creek Current CAG DMA Boundary and Proposed CAG DMA Boundary Expansion

1.2 History for the Proposal

The Town of Queen Creek's CAG 208 Plan Amendment proposal to expand the Town's current CAG DMA boundary was initiated from the discussions with the Arizona State Land Department (ASLD) regarding the Town providing water and sewer services within lands identified within the proposed CAG DMA boundary expansion. The ASLD governing board has requested the Town of Queen Creek annex the state lands into the Town.

Within the proposed CAG DMA boundary expansion, 6.7 square miles is undeveloped desert owned by ASLD. Currently, 1.5 square miles is low density residential that was developed with septic systems and the remaining 1.5 square miles being farm land for a total of 9.7 square miles. The Town of Queen Creek intends to collect and treat future wastewater into their current collection system from the State Lands portion and farm lands once developed.

1.3 Natural Environment

The region in which the proposed CAG DMA boundary expansion rests is semi-arid with annual precipitation of seven (7) to eight (8) inches of rain. The surface water flow and overland flows occur in response to rainfall events. The water generally drains towards the local washes that flow westward. Around the washes, Ironwood and Palo Verde trees can be found while other common plants within the undeveloped areas are typically Creosote bush scrub and Ocotillo cacti. The flow of the surface water east of the Central Arizona Project (CAP) canal is first controlled by the current flood control structures and then slowly discharged into the local washes. The surface water west of the CAP Canal will generally flow to the southwest towards the Queen Creek Wash.

The groundwater hydrology/water quality has also been derived from the Arizona Geologic Survey (AzGS) 2017 Report *"Subsurface Hydrogeologic Investigation of the Superstition Vistas Planning Area, Maricopa and Pinal Counties, Arizona,"* authored by B.F. Gootee, L.P. Cook, J.J. Young, and P.A. Pearthree. A copy of the report can be obtained at the following link: Download Report. While the AzGS's report intent was for the entire Superstition Vistas Planning Area, information was extracted within the Townships of 1S, 8E and 2S, 8E for this CAG 208 Plan Amendment. To summarize the report, the depth to groundwater ranges around 300 feet below land surface (bls) and generally flows westward, while the depth to bedrock ranges from 4,000 to 7,000 feet bls in the northeast to the southwest respectively.

The aquifer's source material is mostly derived from the Queen Creek Wash with some aquifer material coming from the Superstition Mountains. The subsurface geology is alluvial fill consisting of clay, silt, and gravel. The water quality is generally good as the nitrate, fluoride, and arsenic are below the maximum contaminant levels (MCLs). Table 1-1 presents the aquifer hydraulic characteristics.

Table 1-1
Summary of Phase II Aquifer Test Results: Well Pertinent Data and Transmissivity

Well Name	Well Owner	ADWR Registry	Cadastral	Well Depth (ft)	Well Dia (inch)	Perf Top (ft)	Perf Bottom (ft)	Specific Capacity (gpm/ft)	Transmissivity (gpd/ft)	Analytical Method
Queen Creek Pit Well	ASLD	55-209685	D(2-9)15DBB	815	8.625	610	690	27	296,100	Theis Recovery
Ranch 160 No.1 (East Well)	AWC	55-583450	D(2-10)5CCD	1330	12	780	1140	9.6	101,450	Cooper Jacob & Theis Recovery
Ranch 160 No.2 (West Well)	AWC	55-588620	D(2-10)6DDD	1255	16	560	1240	0.4	1,232	Theis Recovery
Test Well B2a	ASLD	55-226297	D(1-8)36CCC	1228	12.75	700	1200	4.2	9,832	Theis & Theis Recovery

Source: ADWR Pump Installation Completion Report, dated 8-26-2002.

SECTION 2.0

2 Project Description

This section provides an overview, brief boundary and location descriptions, current and future conditions as well as summaries of the Town's Water and Sewer Master Plans.

2.1 Overview

The Town of Queen Creek currently has DMA status within Maricopa and Pinal Counties. The current MAG DMA boundary area in Maricopa County is approximately 32.7 square miles and the current CAG DMA boundary area in Pinal County is approximately 9.2 square miles. This CAG 208 Plan Amendment for expansion will increase the current CAG DMA boundary area by approximately 9.7 square miles. Pending approval of this CAG 208 Plan Amendment, the combined current CAG DMA boundary area and proposed CAG DMA boundary expansion will be approximately 18.9 square miles. Table 2.1 summarizes the areas in each DMA.

Table 2-1
DMA Areas

DMA	Area
Current MAG DMA boundary	32.7 square miles
Current CAG DMA boundary	9.2 square miles
Proposed CAG DMA boundary expansion	9.7 square miles
Total	**51.6 square miles**

The Town of Queen Creek processes all its collected wastewater at the Greenfield Water Reclamation Plant (GWRP) located in the Town of Gilbert within Maricopa County. The GWRP is operated by the City of Mesa and is co-owned by the Town of Gilbert, the Town of Queen Creek, and the City of Mesa. The GWRP currently has 16.0 million gallons per day (mgd) of treatment capacity and produces A+ effluent with biological nutrient removal (BNR) and micro filtration. There are no plans to change the effluent quality. Any changes to the effluent quality would need to be addressed through MAG's 208 planning process.

The Town of Queen Creek's current share of the capacity at the GWRP is 4.0 mgd with a contractual option to expand its capacity to 8.0 mgd. In 2016, the Town delivered 2.0 mgd to the GWRP for treatment. The Town's projected 2040 wastewater flows, including the proposed CAG DMA boundary expansion, current CAG DMA boundary, and current MAG DMA boundary, could range from 7.0 to 7.5 mgd. The Town plans to treat any future wastewater within the proposed CAG DMA boundary at the GWRP.

This CAG 208 Plan Amendment does not include a new wastewater treatment facility or expansion. However, if future wastewater flows require an expansion of the GWRP, the expansion would need to abide by MAG's 208 planning process. Other options that would require a new wastewater treatment facility within the current CAG DMA boundary or proposed CAG DMA boundary expansion would require another CAG 208 Plan Amendment.

The proposed CAG DMA boundary expansion directly borders the City of Mesa to the east and unincorporated Pinal County elsewhere with State Lands as the primary land owner. Johnson Utilities currently provides water and sewer services to lands one mile south of the proposed CAG DMA boundary expansion. This unincorporated area of Pinal County is known as San Tan Valley in which there are continuing efforts for the area to be incorporated.

2.2 Boundary & Location Descriptions

The Town of Queen Creek's CAG 208 Plan Amendment proposal seeks to expand its current CAG DMA boundary by approximately 9.7 square miles (See Figure 1-1). The proposed CAG DMA boundary expansion would allow the Town

to have authority over who provides sewer services in the proposed area, with the intent that the Town would be the one to provide those services.

Within the proposed CAG DMA boundary expansion, 6.7 square miles is undeveloped desert owned by ASLD. Currently, 1.5 square miles is very low density residential that was developed with septic systems and the remaining 1.5 square miles being farm land for a total of 9.7 square miles. The Town of Queen Creek intends to collect and treat future wastewater into their current collection system from the ASLD portion and farm lands once developed.

The current CAG DMA boundary includes two separate areas: 1) Approximately 2 square miles of land between Meridian Road on the west and Ironwood (Gantzel) Road on the east, Ocotillo Road on the north and Combs Road on the south; and 2) Approximately 7.2 square miles south of Hunt Highway between Power Road and Crismon Road. Figure 1-1 shows the current CAG DMA boundaries in blue.

The proposed CAG DMA boundary expansion starts at the Frye Road and Meridian Road intersection. Then head south along Meridian Road for 2.5 miles to Queen Creek Road, before heading east along Queen Creek Road for approximately 4.2 miles to the CAP canal. Follow along the CAP canal to the northwest approximately 2.6 miles to the Frye Road alignment, then west along the Frye Road alignment approximately 3.5 miles back to the Frye Road and Meridian Road intersection. Figure 1-1 shows the proposed CAG DMA boundary expansion in light green. The complete Legal Description is provided in Appendix D.

2.3 Current & Future Conditions

2.3.1 Population

The Town of Queen Creek's population grew at 5.16% per year from 2010 to 2014. MAG generated population projections were derived from the MAG report entitled "Socioeconomic Projections, Population and Employment," June 2016. The MAG reports are also used for The State's official estimates and projections. Table 2-2 shows the population projections for the current MAG DMA boundary, the current CAG DMA boundary and the proposed CAG DMA boundary expansion. Some of the Transportation Area Zone (TAZ) areas and population were adjusted to be consistent with the current DMA boundary square miles and the proposed CAG DMA boundary expansion square miles. The TAZ population estimates were adjusted proportionally to the land area.

Table 2-2
Town of Queen Creek Population Projections

	Area (square miles)	2015 Population	2020 Population	2030 Population	2040 Population
Current MAG DMA Boundary	32.7	39,900	50,090	70,914	76,313
Current CAG DMA Boundary	9.2	5,731	6,822	9,145	11,679
Proposed CAG DMA Boundary Expansion	9.7	4,114	4,424	4,651	4,851
TOTAL	51.6	49,745	61,336	84,710	92,843

2.3.2 Land Use

The current CAG DMA boundary south of Hunt Highway has encompasses approximately 7.2 square miles. This area is comprised of 1 square mile of large lots (generally over one acre) developments on septic systems and 6.2 square miles of disturbed desert. Commercial development is minimal and there are currently no PADs.

The current CAG DMA boundary east of Meridian road encompasses approximately 2 square miles and approximately one square mile is agricultural fields and the remaining 1 square mile is comprised of large lot subdivisions on septic systems. A small portion of this area is comprised of commercial development that is served by both septic and the public wastewater system. There are currently no PADs.

The proposed CAG DMA Boundary Expansion is 9.7 square miles: 6.7 square miles of undeveloped desert owned by the ASLD, 1.5 square miles is residentially developed with septic systems, and the remaining 1.5 square mile is farm land. The Town will provide water and sewer service to the 6.7 square miles of ASLD desert land and 1.5 square mile of farmed land when it is developed.

Johnson Utilities provides sewer service for approximately 89 acres located at the southwest corner of Germann and Kenworthy Roads (Figure G-3). The Combs High School and Combs Elementary School are connected as a single user to the Johnson Utilities sewer system. There are no plans to connect Johnson Utilities' customers to the Queen Creek wastewater system.

ASLD manages 70% the land in the proposed CAG DMA Boundary Expansion. For purposes of this report, it is assumed the State lands will develop similar to the Current MAG and CAG DMA Boundary Area. Based on the Town of Queen Creek Sewer Master Plan and General Plan, residential land use is expected to range from one unit per acre (very low residential) to 8 units per acre (medium high density residential type B) to 25 units per acre (multi-family residential). It also assumed that 19% of State Lands would develop into a commercial land use. Based on the Town of Queen Creek General Plan's Future Land Use, 22% of acreage will be very low density residential, 4% of acreage will be low density residential, and 1% will be higher density residential. Using 2015 as a baseline, the number of dwelling units in each respective boundary were calculated based on future population growth (Table 2-3).

Table 2-3
Town of Queen Creek Population, Land Use, and Wastewater Flow Rate

	Area (Square Miles)	2015	2020	2030	2040
Current MAG DMA Boundary					
Population	32.7	39,900	50,090	70,914	76,313
Dwelling Units		14,000	18,000	25,000	27,000
Flow Rate – *(Inflow to GWRP) – (mgd)*		1.68*	1.99	3.34	5.20
Current CAG DMA Boundary					
Population	9.2	5,731	6,822	9,145	11,679
Dwelling Units		4,000	5,000	7,000	8,000
Flow Rate – *(Inflow to GWRP) – (mgd)*		0.02*	0.3	0.45	0.78
Proposed CAG DMA Boundary					
Population	9.7	4,114	4,424	4,651	4,851
Dwelling Units		4,000	5,000	7,000	8,000
Flow Rate – *(Inflow to GWRP) – (mgd)*		0.00*	0.00	0.00	1.47
TOTAL					
Population	51.6	49,745	61,336	84,710	92,843
Dwelling Units		22,000	28,000	40,000	43,000
Flow Rate – *(Measured Inflow to GWRP) – (mgd)*		1.7*	2.29	3.79	7.45

Notes: Year 2015 is measured inflow; future years 2020, 2030, and 2040 projected using the connection method (see 3.1.2)

2.3.3 Wastewater Flows

Table 2-4 shows the Town's measured and projected wastewater flows into the GWRF. Section 3.1 discusses in more detail how the Town's wastewater flows were projected.

Table 2-4
Town of Queen Creek's Wastewater Flows
Greenfield Water Reclamation Facility (mgd)

Year	Measured inflow to GWRP	Current DMA Boundary		Proposed CAG DMA boundary extension	Total Flows
		MAG	CAG		
2011	1.33	1.33			1.33
2012	1.33	1.32	0.01		1.33
2013	1.45	1.44	0.01		1.45
2014	1.52	1.51	0.01		1.52
2015	1.7	1.68	0.02		1.70
2016	1.87	1.85	0.02		1.87
2020		1.99	0.3	0	2.29
2030		3.34	0.45	0	3.79
2040		5.20	0.78	1.47	7.45

2.3.4 Water Master Plan

This section is a summary of the Town of Queen Creek's December 2015 *Water System Master Plan.* A copy of the plan can be obtained at the following link: Download Water System Master Plan.

The Water System Master Plan presents water infrastructure improvements to meet the Town of Queen Creek's water needs through 2050. It also outlines growth projections and land use densities, which are consistent with the Sewer Master Plan. Figure 2-1 shows the water system planning area at build out. Figure 2-2 shows the projected water planning area's future demands.

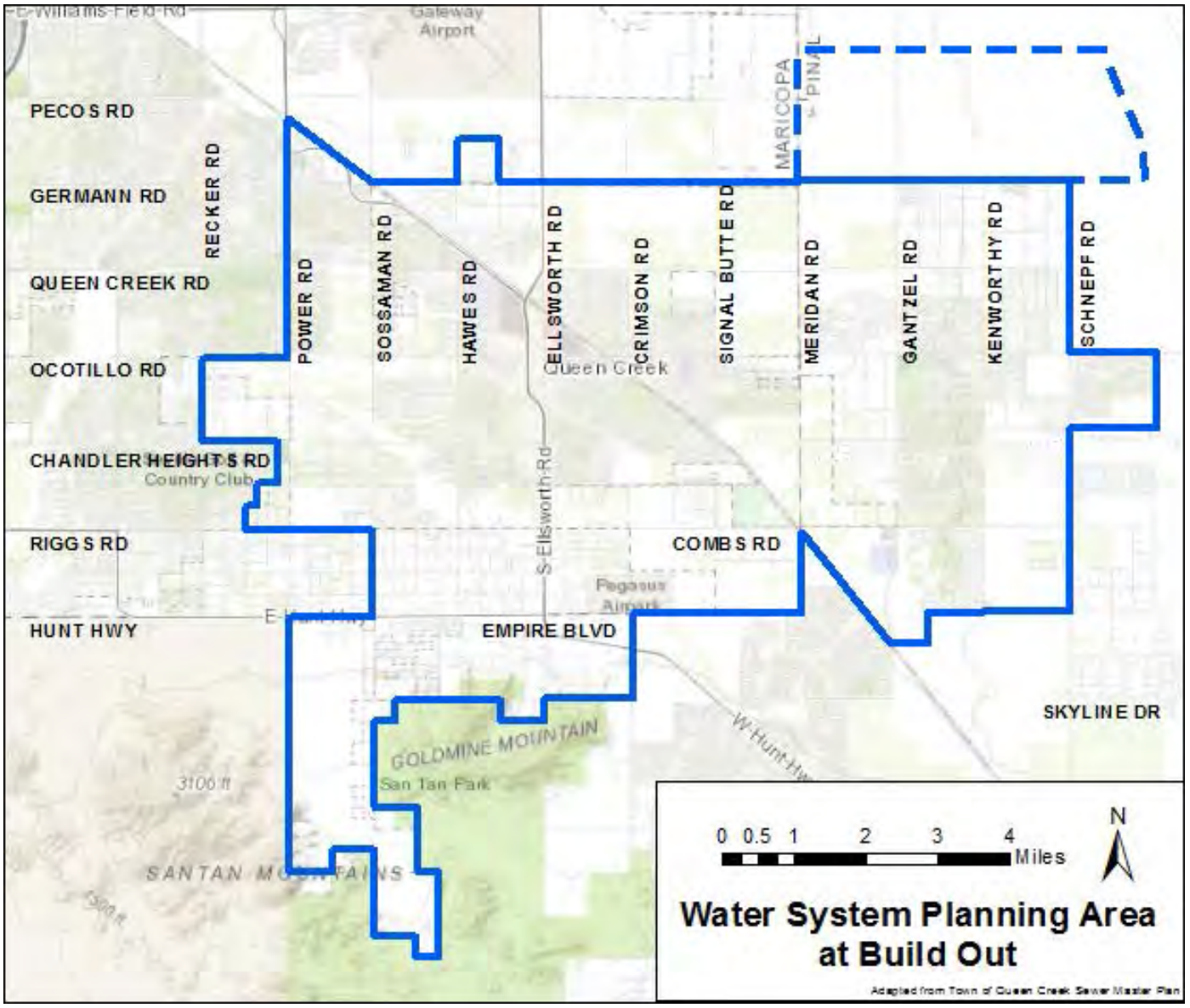

Figure 2-1 Water System Planning Area at Build Out

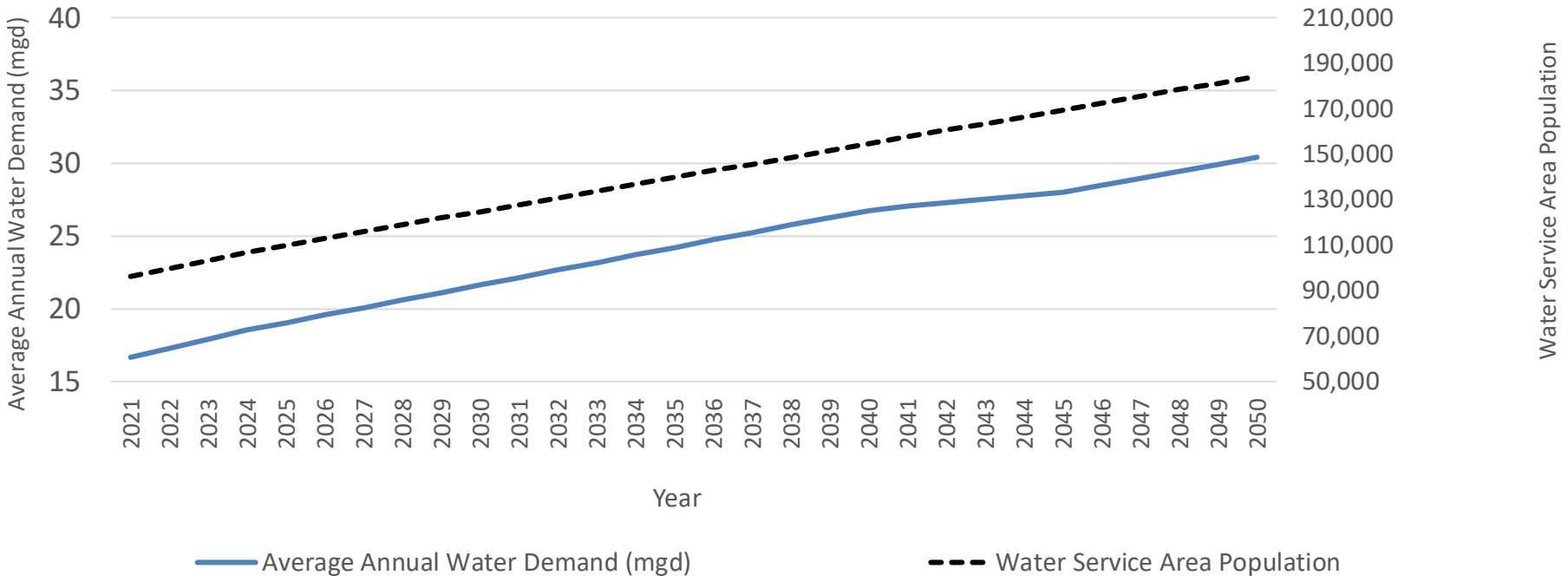

Figure 2-2 Town of Queen Creek Potable Water Demands and Population Projections

2.3.5 Sewer Master Plan

The Town's current sewer system adequately collects sewage and transports it to the GWRP. There are no major improvements needed to serve the Town's currently connected users. Figure G-3 (Appendix G) shows the Town's current areas connected to the Town's sewer system as well as the main sewer collection pipes larger than 10-inches in diameter.

The Town has experienced significant growth and recently produced the "Interceptor Sewer Modeling & Wastewater Master Plan Update 2016" (2016 Sewer Master Plan) to prepare for increased wastewater flows. The Plan evaluated three potential future conditions:

- **Condition 1** examined the 2015 existing wastewater flows plus wastewater flows that would be generated from developments approved by the Town, but not yet constructed.
- **Condition 2** examined 2050 wastewater flow projections within the current MAG DMA and the current CAG DMA.
- **Condition 3** examined wastewater flows for 2050 conditions plus an additional 4.7 square mile area in Pinal County that is outside the Towns' current CAG DMA boundary.

The 2016 Sewer Master Plan evaluated the sewer infrastructure needed for each condition, to transport all the wastewater flows to the GRWP. Extensive sewer flow modeling determined the appropriate sewer sizes. The Sewer Master Plan identified and estimated costs to improve the future sewer system infrastructure needed to manage the wastewater for each condition.

The Town has programed the needed infrastructure improvements and costs in their 5-year Capital Improvement Plan. A copy of the Town of Queen Creek's 2016 Sewer Master Plan can be obtained at the following link. Download Sewer Master Plan

SECTION 3.0

3 Wastewater Management

In 2016, the Town of Queen Creek provided potable water services to 25,581 homes and businesses. The wastewater from the homes and businesses are collected by an underground system of pipes (sewer collection system) that transports the wastewater to the Greenfield Wastewater Reclamation Plant (GWRP) located in Maricopa County. The GWRP cleans the wastewater to ADEQ A+ water quality standards. The treated wastewater, or effluent, is used for outside watering or recharged in the ground for future use. Sometimes, the effluent is discharged to the East Maricopa Floodway when effluent flow exceeds the recharge capacity. Currently, all the effluent generated is reused or discharge in Maricopa County. The Arizona Department of Environmental Quality monitors the effluent discharged to ensure the effluent meets discharge standards. Figure 3-1 depicts where the wastewater is generated, collected, treated, and reused or discharged. The Town owns and operates the sewer collection system. The Town of Queen Creek, Town of Gilbert and the City of Mesa jointly own the GRWP. The City of Mesa operates the GRWP.

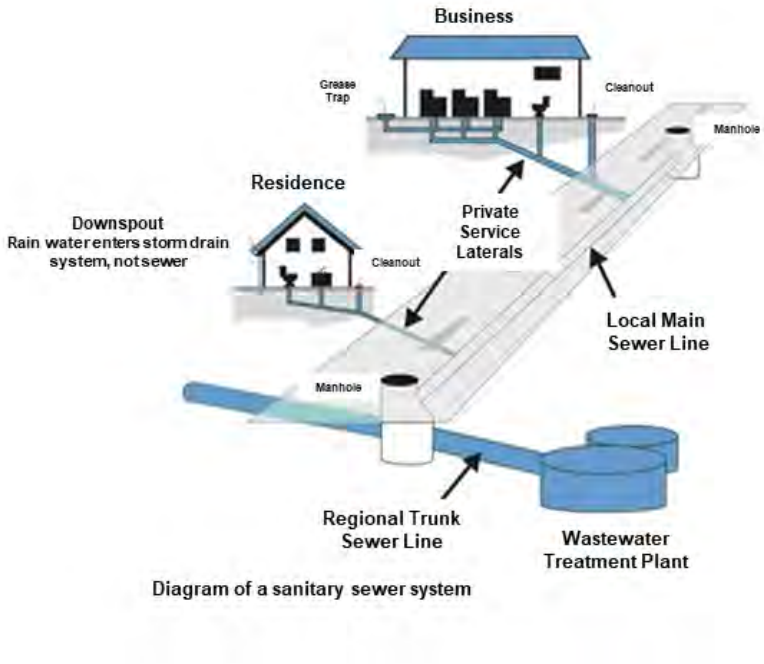

Figure 3-1 Wastewater Flow Cycle

3.1 Wastewater Flow Calculations

The ultimate goal is to understand if the Town of Queen Creek has enough capacity at GWRP within the next 20-year horizon. Currently the Town has rights up to 4.0 mgd with contractual rights up to 8.0 mgd. In order to determine if the capacity exists for the 20-year horizon, the Town of Queen Creek examined two different methods, the Population Method and the Connection Method, to estimate wastewater flows. A comparison of the two flow rates defined by each method has been illustrated in Table 3-1.

3.1.1 Population Method

The Population Method estimates wastewater flows based upon population and unit wastewater flows per persons. The population projections were derived from the MAG report entitled "Socioeconomic Projections, Population and Employment" June 2016, which were used for the State's official estimates and projections. Based on the Population

Method, the Town expects to see a 2040 wastewater flow for the current MAG/CAG DMA boundary and the proposed CAG DMA boundary expansion to be 6.5 mgd, well within the contractually 8.0 mgd.

The 2016 Sewer Master Plan 2016 Water Usage data provided the basis for Equation 1 below, which shows that by dividing the 2016 water demand of sewer connections into the GWRP by the number of residents served by the Queen Creek sewer collection system, an estimate of approximately 70 gallons of wastewater flow per capita per day (gpcd) is reached. Equation 2 shows how the total flows for the population method were calculated using 70 gcpd and the 2015 data as an example.

$$\frac{1{,}937{,}310\ gallons^{1}}{(8{,}952\ residential\ connections^{2} * 3.1 \frac{residents}{connection}^{3})} = 69.8\ gallons\ per\ capita - day \approx 70\ gpcd \qquad \text{Equation 1}$$

[1]January 2016 sewer demand of sewer connections, 2016 Sewer Master Plan, Table 1.4.4.1
[2]January 2016 sewer connections, 2016 Sewer Master Plan, Table 1.4.4.1
[3]2016 Sewer Master Plan, Appendix A, Unit Wastewater Loading Comparison

$$45{,}631\ residents^{4} * 70\ gpcd = 3.19\ mgd \qquad \text{Equation 2}$$

[4]MAG Socioeconomic Projections, Population & Employment, June 2016 Report

3.1.2 Connection Method

The Connection Method estimates wastewater flows based upon the number of connections to the sewer system. The Town of Queen Creek's 2016 Sewer Master Plan used the connection method to determine future wastewater flows. The 2016 Sewer Master Plan examined historic data to determine the mixture of residential and commercial wastewater up to the year 2050. To summarize, the flow data indicated that commercial facilities generated 19 percent of the wastewater flow with the remaining 81 percent as residential. The Town's future development is expected to be similar to the historic development patterns and estimates future flows would replicate the 19/81 split. Future wastewater flows were determined by estimating the residential connections at 3.1 people per residential connection, and additional wastewater flows to account for 19 percent commercial development. The Connection Method is also based on estimated future connections, including connecting clusters of lots smaller than one acre. Dispersed lots larger than one acre would remain on septic.

Wastewater flows were calculated using Equation 3 and the 2015 data as an example:

$$8{,}310\ connections^{1} * 3.1 \frac{residents}{connection} * 70\ gpcd = 1.8\ mgd \qquad \text{Equation 3}$$

[1]2016 Sewer Master Plan

Table 3-1: Wastewater Flows by Method notes that the populations within the current MAG and CAG DMA boundaries that are on septic are not included in the calculation. Based on the Connection Method, the Town expects to see a 2040 wastewater flow for the current MAG/CAG DMA boundary and the proposed CAG DMA boundary expansion to be 5.15 mgd, also well within the contractually 8.0 mgd.

By examining both methods, it is clear that there is more than enough capacity to accommodate the expected flows for the current MAG and CAG DMA boundaries as well as the proposed CAG DMA boundary.

Table 3-1
Town of Queen Creek Wastewater Flows by Method

POPULATION METHOD					CONNECTION METHOD				
Based on MAG Socioeconomic Projections, Population & Employment, June 2016 Report					*Based on 2016 Sewer Master Plan*				
	2015	2020	2030	2040		2015	2020	2030	2040
Current MAG + CAG DMA Boundary*					Current MAG + CAG DMA Boundary*				
Population	45,631	56,912	80,059	87,992	Connections	8,310	13,571	22,446	35,365
Total Flow (mgd)	3.19	3.98	5.60	6.16	Total Flow (mgd)	1.80	2.94	4.87	7.67
Proposed CAG DMA Boundary Expansion**					Proposed CAG DMA Boundary Expansion**				
Population	4,114	4,424	4,651	4,851	Connections	0.00	63	114	144
Total Flow (mgd)	0	0	0	0.34	Total Flow (mgd)	0.00	0.014	0.025	0.031
GRAND TOTAL					GRAND TOTAL				
Population	49,745	61,336	84,710	92,843	Connections	8,310	13,634	22,560	35,509
Total Flow (mgd)	3.19	3.98	5.60	6.50	Total Flow (mgd)	1.80	2.96	4.90	7.71

Notes:
1. 81 % residential flow; 19% commercial flow
2. *Assumes all septic on lots smaller than 2-acres have been connected to Queen Creek sewer system.
3. **Assumes the entire MAG DMA and CAG DMA will be sewered between 2030 and 2040.

Notes:
1. 81% residential flow; 19% commercial flow
2. *Population does not include the population on septic systems.
3. **The existing 4,114 residential population will receive sewer service after 2030.

3.2 Sewage Collection System

In 2016, the Town had 170 miles of sewer lines installed of which there are 50 miles of 10-inch diameter sewers. The Town's Capital Improvement Program includes expanding the sewer system to keep up with the new growth.

3.2.1 Sewage Infrastructure

The Town of Queen Creek owns and operates the sewage collection infrastructure within the area currently connected to the Town's sewer systems. The Town maintains, operates and manages the sewer collection system and associated facilities that transport flows to the GWRP. In December 2014, the Town had 7,947 active sewer connections producing about 1.7 mgd of wastewater. The Town's 2016 Sewer Master Plan presents a detailed analysis of historic wastewater flows, projects future wastewater flows, and develops a program to construct additional sewer collection infrastructure to meet future growth. It also identifies the infrastructure need to provide sewer service to the 35,365 users by 2040. A copy of the Town of Queen Creek's 2016 Sewer Master Plan can be obtained at the following link. Download Sewer Master Plan.

3.3 Treatment Facility Description

This section describes the treatment facility, facility ownership, the sewage collection system, and effluent management.

3.3.1 Treatment Facility Description and Ownership

The GWRP was constructed in two phases. Phase I was completed in 1999, while Phase II was completed in 2007. The facility has a capacity of 52 mgd for all three owners, thus, a MAG 208 Plan Amendment would need to be processes to expand the currently approved 49 mgd. Currently, the GWRP has can treat 16 mgd Average Annual Daily Flow (AADF) of raw sewage (liquids) and 24 mgd AADF solids equivalent from Mesa's Southeast Water Reclamation Plant (SEWRP).

The GWRP is located in the Town of Gilbert, on Greenfield Road, north of Queen Creek Road. The address is:

Greenfield Water Reclamation Plant Town of Gilbert
4400 South Greenfield Road
Gilbert, Arizona 85234

In 2004 the Towns of Gilbert and Queen Creek and the City of Mesa entered into an Inter-Governmental Agreement (IGA) to construct and operate GWRP. The IGA specifies each municipalities' ownership capacity at the initial and build out phase. Table 3-2 shows each municipalities' ownership, flow and treatment capacity. The IGA specifies the City of Mesa is responsible for the maintenance and operation of the GWRP. The Town of Queen Creek currently owns 4.0 mgd capacity in GWRP and the IGA provides the authority for Queen Creek to expand its share of GWRP to 8.0 mgd.

The GWRP provides wastewater treatment, solids handling facilities and reclaimed water storage and transmission facilities with a current design capacity of 16 mgd and expandable to MAG approved capacity of 49 mgd. The Class B sludge is disposed off-site. The GWRP produces A+ reclaimed water for reuse or recharge. The Town currently recharges all of its effluent via a partnership with the Roosevelt Water Conservation District (RWCD). The ADWR Groundwater Saving Facilities(GSF #73-545695.2200) permit is used to store and create long-term storage credits for the Town.

The plant will not discharge to a wash or receiving water course during normal operations. However, when reclaimed water use is substantially reduced, the GWRP can discharge to the East Maricopa Floodway using Arizona Pollutant Discharge Elimination Discharge Permit (AZPDES) # AZ0025241.

Table 3-2
Greenfield Water Reclamation Plant Ownership & Treatment Capacity

Party	Current Ownership Capacity				Ultimate Ownership Capacity			
	Flow (MGD)	BOD (lbs/month)	SS (lbs/month)	TKN (lbs/month)	Flow (MGD)	BOD (lbs/month)	SS (lbs/month)	TKN (lbs/month)
Mesa	4.0	200,150	250,200	40,030	24.0	1,200,960	1,501,200	240,190
Gilbert	8.0	400,300	500,400	80,060	20.0	1,000,800	1,251,000	200,160
Queen Creek	4.0	200,150	250,200	40,030	8.0	400,320	500,400	80,060
Total	**16.0**	**800,600**	**1,000,800**	**160,120**	**52.0***	**2,602,080**	**3,252,600**	**520,410**

*MAG 208 Plan approved 49 mgd. A MAG 208 amendment will be required to treat flows above 49 mgd.

The combined municipal inflow to the GWRP is predominantly domestic wastewater from residential sources. The City of Mesa's plant operator estimates commercial users will contribute up to 10% of GWRP's influent. The 2016 Sewer Master Plan estimates that the Town's discharge will consist of 19% commercial and 81% residential. The City

of Mesa, and the Towns of Gilbert and Queen Creek are responsible for pretreatment compliance and each entity has industrial pretreatment ordinances to manage the commercial wastewater discharges.

The Town of Queen Creek does not accept wastewater flows from outside their CAG DMA boundary or MAG DMA boundary.

3.3.2 Wastewater Treatment Process

GWRP employs the conventional activated sludge process with preliminary treatment (screening and grit removal), primary clarifiers, aeration basins with an integral centrate and return activated sludge (RAS) reaeration basin (CaRRB) zone, secondary clarifiers, cloth disk media tertiary filters, and ultraviolet (UV) disinfection. The treated water quality meets the State's A+ water quality standard. The solids handling facility is designed to produce Class B biosolids from GRWP and from the City of Mesa's South East Water Reclamation Plant (SEWRP). The SEWRP is located in Mesa and falls under the MAG 208 planning process.

The plant produces an A+ reclaimed water [effluent] water quality. The GWRP Effluent Pump Station (EPS) pumps effluent to several locations, including the Gila River Indian Community (GRIC) receiving canal, the Town of Gilbert South Recharge Area and Gilbert Reclaimed Water Reservoir, an RWCD Canal, and an emergency outlet at the East Maricopa Floodway (EMF).

The GWRP is designed with advanced and reliable instrumentation and control systems to monitor the performance of the treatment processes, display operational data and provide alarms and output for operator control, both in normal operation and under emergency conditions. The instrumentation and control system is designed to provide data for operating reports required by ADEQ.

The treatment train includes screening, influent pumping, vortex grit removal, primary sedimentation, activated sludge biological nutrient removal (BNR) with an integral CaRRB process, secondary clarification, tertiary cloth disk media filtration, chlorine disinfection, and reclaimed water [effluent] pumping. Ancillary facilities include flow metering, flow splitting structures, odor control systems, aeration blowers, sludge pumping, and chemical storage and feed systems.

Disinfection. The GWRP employs tertiary filtration prior to ultraviolet disinfection to achieve virus inactivation as required for Class A+ reclaimed water.

Reclaimed Water Facilities. Include effluent water storage reservoir, effluent water pumping station, and effluent water transmission mains. The effluent water transmission mains are the responsibility of the individual partners of the GWRP.

Sludge/Solids processing. As discussed above the solids processing facilities will handle the solids generated during the wastewater treatment process and from Mesa's SEWRP. Waste activated sludge (WAS) produced in the biological nutrient removal basins/secondary clarifiers is pumped to storage tanks for holding. The WAS is pumped from the storage tanks, blended with polymer to enhance thickening, and thickened in centrifuges. The thickened WAS is pumped to the anaerobic digesters for digestion and stabilization. Primary sludge withdrawn from the primary clarifiers is pumped to the anaerobic digesters for digestion. Digested sludge is displaced on a regular basis to a storage digester. From there, the digested sludge is blended with another polymer and then dewatered in dewatering centrifuges. The dewatered sludge is pumped by cake pumps to dewatered sludge hoppers. Dewatered sludge is withdrawn from the sludge storage hoppers and loaded into trucks for off-site disposal by land application at a farm in Coolidge, AZ. Alternatively, septage may be delivered to receiving businesses such as the Superstition Mountains Community Facilities District No.1 in Apache Junction, AZ or Liquid Environmental Solutions in Phoenix, AZ. Currently GWRP does not accept commercial or residential septic wastes.

Odor control. The GWRP is a "good neighbor" to the local residents. The plant is designed to have several different odor control systems to address specific odor sources. These odor control systems address the following: influent sewers and headworks facilities, primary sedimentation and aeration basins, and solids processing facilities. These odor control systems are designed to remove 99+% of the odor causing compounds in the foul air generated in the above listed facilities.

3.4 Effluent Management

The Town of Queen Creek has a Groundwater Savings Permit (GSF #73-545695.2200) and partners with the RWCD to manage the Town's effluent. The Town delivers effluent to the RWCD Main Canal where RWCD blends the effluent with its water supplies. Once the effluent is delivered to RWCD, RWCD is responsible for all regulatory compliance. The blended effluent/RWCD water is delivered to RWCD customers. The Town receives Long Term Storage Credits (LTSCs) from the Arizona Department of Water Resources (ADWR). Figure G-3 (Appendix G) shows the location where the Town's effluent will be delivered in the RWCD canal.

When RWCD cannot accept the Town's effluent, the City of Mesa and/or the Town of Gilbert can divert the Town of Queen Creek's effluent for their use. Any effluent that the Towns of Queen Creek and Gilbert, and the City of Mesa cannot use is discharged to the East Maricopa Floodway via an Arizona Pollutant Discharge Elimination Discharge Permit (AZPDES) # AZ0025241.

As the Town's effluent supply grows, the Town may consider other methods to beneficially use its effluent. Some of these methods could include: direct use for landscaping or lakes within the Town, exchange for a surface water source, or recharge within the Town's boundaries.

SECTION 4.0

4 Construction

Construction of the GWRP with its current 16.0 mgd capacity was completed in April 2007. Currently, there are no planned expansions of the GWRP. However, as the Town grows, it will exceed its current allowed capacity of 4.0 mgd and will contractually expand up to 6.0 mgd or more. The Town's contractual agreement allows for up to 8.0 mgd. It is anticipated the expansion to 6.0 mgd could take place in the next 5 to 10-years. Construction of the GWRP to the approved capacity of 49.0 mgd is unknown as build-out cannot be determined at this time.

SECTION 5.0

5 Impact

5.1 Known Water Quality Issues

The area encompassed by the proposed CAG DMA boundary expansion is currently actively used for agricultural purposes, large lot homes, and desert lands. As with all agricultural land use, there is the potential for degradation of groundwater due to application of fertilizers and pesticides. The inclusion of the proposed CAG DMA boundary expansion into the Town of Queen Creek sewer service area, along with the development of these land areas, will minimize or reduce the impact of agricultural use of the land on groundwater.

The proposed conveyance of the wastewater generated in the proposed CAG DMA boundary expansion to the GWRP will also minimize the potential degradation of groundwater that multiple small treatment plants in the area could present.

5.2 Point Source Pollution

The proposed CAG DMA boundary expansion will be developed with a collection system that ties to the Town of Queen Creek collection system, which will be tributary to the GWRP. Since the new collection system is not envisioned to require any lift stations, potential point sources of pollution are greatly reduced or eliminated.

5.3 Non-Point Source Pollution

Since the proposed CAG DMA boundary expansion will be included in the Town of Queen Creek's Municipal Planning Area and zoned according to approved General Plan, the nitrate and biological loads on the aquifer will be reduced as a result of conversion of septic systems to sewer collection, thus reducing or eliminating the potential for non-point sources of pollution.

5.4 Soil Erosion

The potential for soil erosion, due to wind or water, will be greatly reduced by including the proposed CAG DMA boundary expansion into the area currently connected to the Queen Creek sewer system. Since the Town would then include this area in its approved General Plan, the Town would enforce its zoning and development rules. These rules seek to eliminate soil erosion through proper planning and adequate engineering of developments.

5.5 Air Quality

The air quality in the area should see a net improvement as the agricultural land and raw desert land is converted to commercial and residential uses, the potential for wind erosion of soil will be greatly reduced or eliminated. Community development standards of the Town require stormwater retention/detention to eliminate run-off and soil erosion.

5.6 Water-Based Recreation

The proposed CAG DMA boundary expansion does not appear to offer opportunities for water-based recreation at this time. This situation could change if developers in the expanded service area proposed some type of manmade lake, using reclaimed water, for boating or other suitable recreational uses. The potential for water-based recreation is dependent on the nature of the community amenities included in the individual Planned Area Developments that will be submitted by developers to the Town of Queen Creek in the future.

SECTION 6.0

6 Permits

There are no plans to deviate from the 2016 Sewer Master Plan. Acquiring permits for the proposed CAG DMA Boundary Area could occur around 2030. When the designs are near completion, all required permits will be acquired.

This section will discuss the permits required for the GWRP and for the proposed CAG DMA boundary expansion in the subsections below.

6.1 Air Quality Permit

The GWRP is located in Maricopa County. The plant is required under Maricopa County Environmental Services department (MCDES) Rule 200 to obtain a Non-Title V Air Quality Permit. Queen Creek, Gilbert and Mesa have filed the joint application for this permit. It is not anticipated that construction of collection sewers in the proposed DMA boundary expansion will require an Air Quality Permit since the sewers will not be emitters of regulated air pollutants.

6.2 ADWR Recharge Permits

Currently, the Town manages its effluent through a Groundwater Savings Permit (#73-545695.2200) by delivering effluent to the RWCD. The Town also holds a Water Storage Permit (#74-583025.0000). Once the Town exceeds the RWCD's capacity to accept the Town's effluent, they will mostly look towards constructing an Underground Storage Facility. The appropriate Aquifer Protection Permits, Underground Storage Facility Permit, and Water Storage Permits will be acquired.

6.3 ADWR Recovery Well Permit

As a standard practice, the Town's new wells will be permitted as a recovery well.

6.4 Aquifer Protection Permit (APP)

The GWRP is subject to Aquifer Protection Permit (APP) Number P105443. This APP was filed jointly by Queen Creek, Gilbert and Mesa. It is anticipated that the Town of Queen Creek will submit a Type 4.01 Collection System APP application when design of the collection system in the proposed CAG DMA boundary expansion commences.

6.5 AZPDES Permit

The GWRP emergency outfall is subject to AZPDES permit number AZ0025241 submitted to ADEQ jointly by Queen Creek, Gilbert and Mesa for emergency discharge to the FCDMC East Maricopa Floodway. No AZPDES permit is anticipated for the proposed CAG DMA boundary expansion.

6.6 AZPDES Stormwater Pollution Prevention Permit

When sewer construction in the proposed CAG DMA boundary expansion is ready to commence, a AZPDES Stormwater Pollution Prevention Permit will be applied for by the appropriate construction contractor.

6.7 CAG 208 Water Quality Management Plan Amendment

This CAG Section 208 Water Quality Management Plan Amendment is submitted by the Town of Queen Creek to address the proposed CAG DMA boundary expansion. Additional CAG 208 Plan Amendments will be applied for significant changes in the Town's wastewater management strategy that triggers such an Amendment process as outlined within the CAG Section 208 Water Quality Management Plan.

6.8 Construction Permits

The appropriate construction permits will be required when new sewers are installed in the proposed CAG DMA boundary expansion.

6.9 Local Floodplain and Drainage Regulations

There are some floodplains in the proposed CAG DMA boundary expansion. When the area is developed, the developer will be required to comply with the Pinal County Floodplain regulations.

6.10 Non-point Source Permits

Not Applicable. Non-point source permits won't be required for when the sewer collection system expands into the proposed CAG DMA boundary expansion.

6.11 Reclaimed Water Reuse Permit

Currently, reclaimed water is not used within the Town corporate limits. If reclaimed water will be used in the proposed CAG DMA boundary expansion, the Town or developer will acquire the appropriate reclaimed water use permit.

6.12 Sludge Management

The solids treatment process at the GWRP is regulated by the Aquifer Protection Permit. Class B dewatered sludge is hauled to a permitted off-site disposal site. It is not anticipated that the collection system in the proposed CAG DMA boundary expansion would require a Sludge Management permit.

SECTION 7.0

7 Finance Information

The Town of Queen Creek's AA bond rating reflects the Town's strong financial position. Fitch's 2018 financial analysis of the Town's financial AA bond rating is:

> ***"…bond rating reflects solid pledge revenue growth prospects and expected strong resilience during recessionary economic periods."***

Table 7-1 is a summary of a recent audit.

Table 7-1
Town of Queen Creek
Comprehensive Annual Financial Report Summary, June 30, 2017

Assets	$650,847,027
Deferred Outflows of Resources	8,629,908
Liabilities	213,263,011
Deferred Inflow of Resources	3,209,999
Net Position	**$443,003,925**

Queen Creek's FY 2018 budgeted expenditures are $213,093,455.

APPENDIX A 208 CHECKLIST

APPENDIX A

Requirement	Provide Brief Summary Of How Requirements Are Addressed	Addressed On Page
AUTHORITY 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.	• In 2007 the CAG Regional Council approved the Town of Queen Creek as a DMA and established its CAG DMA boundaries. The Town of Queen Creek is proposing an expansion of its CAG DMA are by approximately 9.8 square miles.	1-1
20-YEAR NEEDS 2) Clearly describe the existing wastewater treatment (WWT) facilities.	• The Greenfield Water Reclamation Plant (GWRP) is located in the Town of Gilbert (Maricopa County), on Greenfield Road, north of Queen Creek Road (4400 South Greenfield Road). The GRWP is operated by the City of Mesa and the plant is co-owned by the Towns of Gilbert and Queen Creek, and the City of Mesa. The GRWP includes screening, grit removal, primary clarification and biological nutrient removal, secondary sedimentation, filtration and disinfection. Solids handling includes thickening, anaerobic digestion and dewatering. GRWP biological nutrient removal and micro filtration to produce an A+ effluent suitable for recharge or direct reuse.	3-4 3-5
3) Show WWT certified and service areas for private utilities and sanitary district boundaries if possible.	• Figures 1-1 and G-2 depict the Town of Queen Creek's current and proposed DMA Boundaries (MAG DMA – orange, CAG DMA – blue, Proposed Expansion area – green). Figure G-3 shows the existing sewer mains, the GRWP, and discharge point	1-2 Appendix G: Figures G-2 and G-3
4) Clearly describe alternatives and the recommended WWT plan: Provide POPTAC population estimates (or COG-approved estimates only where POPTAC not available) over 20-year period.	• The GWRP has a current design capacity of 16 mgd and is expandable to 52 mgd. The Town of Queen Creek's current capacity is 4.0 mgd with a contractual option to expand their capacity to 8.0 mgd. • MAG Population Data projects population of 92,843 in MAG and CAG DMA boundary areas plus proposed expansion area.	2-1 2-2
5) Provide wastewater flow estimates over the 20-year planning period.	• The Town of Queen Creek's projected wastewater flows for 2040 could range from 7.0 to 7.5 mgd. Table 3-1 shows the flow projection using the Town of Queen Creek's Master Plan. 2040 projections are 7.45 mgd. Table 3-1 also shows 2040 projections of 6.5 mgd using MAG population method.	3-3
6) Illustrate the WWT planning and service areas.	• Figure 1-1 and all Figures in Appendix G show the existing MAG and CAG DMA areas, the proposed CAG DMA expansion area, and the Town of Queen Creek's Planning Area.	1-2 Appendix G G-1 to G-5

7) Describe the type and capacity of the recommended WWT Plant.	• The GWRP provides wastewater treatment, solids handling facilities and reclaimed water storage and transmission facilities with a current design capacity of 16 mgd and expandable to 52 mgd. The current approved maximum capacity is 49 mgd, per MAG Plan Amendment. The GRWP produces A+ reclaimed water for reuse or recharge. The GWRP currently has 16.0 million gallons per day (mgd) treatment capacity.	3-4
8) Identify water quality problems, consider alternative control measures, and recommend solution for implementation.	• There are no water quality problems. Water quality is generally good: nitrate, fluoride, and arsenic are below the maximum contaminant levels (MCLs).	1-3 5-1
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?	• GRWP is co-owned by the Towns of Gilbert and Queen Creek and the City of Mesa. The City of Mesa is responsible for the maintenance and operation of the GRWP. There are no current utilities within the proposed CAG DMA boundary expansion and the intent is to connect to the Town's current system.	3-4
10) Describe method of effluent disposal and reuse sites (if appropriate).	• The GRWP produces A+ reclaimed water for reuse or recharge. The Town currently recharges all of its effluent via a partnership with the Roosevelt Water Conservation District (RWCD). The ADWR Groundwater Saving Faculties permit is used to stored and create long term storage credits for the Town. • The Town of Queen Creek has a Groundwater Savings Permit (GSF) and partners with the RWCD to manage the Town's effluent. The Town delivers effluent to the RWCD Main Canal where RWCD blends the effluent with its water supplies. Once the effluent is delivered to RWCD, RWCD is responsible for all regulatory compliance. The blended effluent/RWCD water is delivered to RWCD customers. The Town receives Long Term Storage Credits (LTSCs) from the Arizona Department of Water Resources (ADWR). • The plant will not discharge to a wash or receiving water course during normal operations. However, when reclaimed water use is substantially reduced, the GRWP can discharge to the East Maricopa Floodway using an Arizona Pollutant Discharge Elimination Discharge Permit (AZPDES) # AZ0025241.	3-4 3-5 6-1
11) If Sanitary Districts are within a proposed planning or service area, describe who serves the Sanitary Districts and when.	• The Town has infrastructure to collect sewage within the area currently connected to the Queen Creek sewer system. In December 2014, the Town had 7,947 active sewer connections producing about 1.5 mgd of wastewater. The Town's 2016 Sewer Master Plan presents a detailed analysis of historic wastewater flows, projects future wastewater flows, and develops a program to construct additional sewer collection infrastructure to meet future growth.	3-4

APPENDIX A

12) Describe ownership of land proposed for plant sites and reuse areas.	• The GWRP is an existing plant located in the Town of Gilbert. It is co-owned by the City of Mesa, Towns of Gilbert and Queen Creek. The Town currently recharges all of its effluent via a partnership with the Roosevelt Water Conservation District (RWCD)	3-4
13) Address time frames in the development of the treatment works.	• The GWRP is an existing plant with sufficient capacity.	3-4
14) Address financial constraints in the development of the treatment works.	• The Town doesn't anticipate any financial constraints in the development of the treatment works. The Town holds a strong financial position based on its AA bond rating.	7-1
15) Describe how discharges will comply with EPA municipal and industrial stormwater discharge regulations (Section 405, CWA).	• The Town of Queen Creek has a Groundwater Savings Permit (GSF) and partners with the RWCD to manage the Town's effluent. Figure G-4 (Appendix G) shows the location where the Town's effluent will be deliver in the RWCD canal. • Any effluent that the Towns of Queen Creek and Gilbert, and the City of Mesa cannot use is discharged to the East Maricopa Floodway via an Arizona Pollutant Discharge Elimination Discharge Permit (AZPDES) # AZ0025241	3-4 6-1 Appendix G Figure G-4
16) Describe how open areas and recreational opportunities will result from improved water quality and how those will be used.	• There is no foreseeable use for water-based recreation at this time. Inclusion of the proposed DMA boundary expansion into Queen Creek will promote master planned developments and community amenities for recreation.	5-1
17) Describe potential use of lands associated with treatment works and increased access to water-based recreation, if applicable.	• There is no foreseeable use for water-based recreation at this time. Inclusion of the proposed DMA boundary expansion into Queen Creek will promote master planned developments and community amenities for recreation.	5-1
REGULATIONS 18) Describe types of permits needed, including NPDES, APP and reuse.	• Aquifer Protection Permits, Underground Storage Facility Permit, and Water Storage Permits will be acquired by the Town when necessary. • It is anticipated that the Town of Queen Creek will submit a Type 4.01 Collection System APP application when design of the collection system in the proposed CAG DMA boundary expansion commences. • No AZPDES permit is anticipated for the proposed CAG DMA boundary expansion.	6-1
19) Describe restrictions on NPDES permits, if needed, for discharge and sludge disposal.	• The Greenfield WRP will not discharge effluent, but will produce ADEQ Class A+ reclaimed water. Stabilized digested Class B sludge will be disposed off-site.	3-6
20) Provide documentation of communication with ADEQ Permitting Section 30 to 60 days prior to public hearing regarding the need for specific permits.	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time.	n/a

21) Describe pretreatment requirements and method of adherence to requirements (Section 208 (b)(2)(D), CWA).	• Queen Creek has a pre-treatment program to regulate constituents in industrial flow discharge to the collection system. As new sewer infrastructure is added, the pre-treatment program will incorporate these new areas.	n/a
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).	• Sewer construction contractors will be required to obtain an AZPDES/NPDES Storm Water Pollution Prevention Permit and protect surface water quality from degradation during construction.	n/a
23) Describe alternatives and recommendation in the disposition of sludge generated. (Section 405 CWA)	• The preferred sludge processing train includes thickening, anaerobic digestion, dewatering, and off-site disposal of Class B sludge.	3-6
24) Define any nonpoint issues related to the proposed facility and outline procedures to control them.	• There are no anticipated non-point source pollution issues.	6-2
25) Describe process to handle all mining runoff, orphan sites and underground pollutants, if applicable.	• No mining run-off or orphan sites are involved in the GWRP or the area connected to the Queen Creek sewer collection system.	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.	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time. There is no mining involved.	n/a
27) If mining related, define what specialized procedures will be initiated for orphan sites, if applicable.	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time. There is no mining involved.	n/a
CONSTRUCTION 28) Define construction priorities and time schedules for initiation and completion.	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time. There is no construction planned at this time.	n/a
29) Identify agencies that will construct, operate and maintain the facilities and otherwise carry out the plan.	• Mesa, Gilbert, and Queen Creek jointly constructed and maintain and operate the GWRP. Queen Creek would construct, maintain, and operate the sewers in the expanded area.	3-4
30) Identify construction activity-related sources of pollution and set forth procedures and methods to control, to the extent feasible, such sources.	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time. There is no construction planned at this time.	n/a
FINANCING AND OTHER MEASURES NECESSARY 31) If plan proposes to take over certificated private utility, describe how, when and financing will be managed.	• The Town is not anticipating a takeover of any private utilities at this time.	n/a
32) Describe any significant measure necessary to carry out the plan, e.g., institutional, financial, economic, etc.	• Additional CAG 208 Plan Amendments will be applied for significant changes in the Town's wastewater management strategy that triggers such an Amendment process as outlined within the CAG Section 208 Water Quality Management Plan.	6-1 6-2

33) Describe proposed method(s) of community financing.	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time.	n/a
34) Provide financial information to assure DMA has financial capability to operate and maintain wastewater system over its useful life.	• The Town is responsible for financial planning of the project for its useful life.	7-1
35) Provide a time line outlining period of time necessary for carrying out plan implementation.	• This CAG 208 Plan Amendment is for DMA boundary expansion and is not applicable at this time.	n/a
36) Provide financial information indicating the method and measures necessary to achieve project financing. (Section 201 CWA or Section 604 may apply).	• This CAG 208 Plan Amendment is for a DMA boundary expansion and is not applicable at this time.	n/a
IMPLEMENTABILITY 37) Describe impacts and implementability of Plan.	• The proposed DMA boundary will allow the Town of Queen Creek to extend sewer service and thus reduce or eliminate point and non-point sources of pollution by reducing nitrate and biological loads on the aquifer as wastewater is collected via a sewer system, reduce soil erosion, and increase the potential for water-based recreation by attracting master-planned communities. • The Town of Queen Creek is well-prepared from a governance, financial, and operational perspective to extend sewer service to the proposed DMA boundary.	3-4 5-1 6-1 6-2 7-1
38) Describe impacts on existing wastewater (WW) facilities, e.g., Sanitary district, infrastructure/facilities and certificated areas.	• The proposed DMA boundary is not currently served by any collection system.	n/a
39) Describe how and when existing package plants will be connected to a regional system.	• No package plants are in the area.	n/a
40) Describe the impact on communities and businesses affected by the plan.	• The proposed DMA boundary will attract master planned communities with commercial development and community amenities.	n/a
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).	• The GWRP will have the capacity for flows from the proposed DMA boundary area. No package plants will be utilized. Existing low density development is serviced by septic systems and may have the option of sewer treatment once sewer lines become available. Lots larger than 1 acre will not be required to connect but will be given the option.	3-4
PUBLIC PARTICIPATION 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)	• Information to be provided by CAG at that appropriate time during the CAG 208 Planning Process.	Appendix E
43) List location where documents are available for review at least 30 days before public hearing.	• Information to be provided by CAG at that appropriate time during the CAG 208 Planning Process.	Appendix E

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.	• Information to be provided by CAG at that appropriate time during the CAG 208 Planning Process.	Appendix E
45) Submit affidavit of publication for official newspaper publication.	• Information to be provided by CAG at that appropriate time during the CAG 208 Planning Process.	Appendix E
46) Submit responsiveness summary for public hearing.	• Information to be provided by CAG at that appropriate time during the CAG 208 Planning Process.	Appendix E

APPENDIX B SELF CERTIFICATION LETTER

DICKINSON WRIGHT PLLC

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March 7, 2018

Mr. Robert MacDonald, P.E.
Executive Director
CENTRAL ARIZONA GOVERNMENTS
2540 W. Apache Trail Suite 108
Apache Junction, Arizona 85219

Re: Town of Queen Creek 208 Plan Amendment-Self Certification

Dear Mr. MacDonald:

As legal counsel for the Town of Queen Creek, Arizona, I hereby certify, in connection with wastewater collection and treatment facilities that serve homes, businesses, industries and other users within the jurisdictional limits of the Town of Queen Creek (which wastewater facilities are referred to in this letter as the "Subject Facilities") and pursuant to Clean Water Act § 208(c)(2) [33 U.S.C. § 1288(c)(2)], that Queen Creek is authorized by law:

(A) To carry out appropriate portions of Central Arizona Governments' Areawide Water Quality Management Plan (the "208 Plan") developed under Clean Water Act § 208, subsection (b);

(B) To manage effectively the Subject Facilities and any other waste treatment works and related facilities serving such area in conformance with the 208 Plan;

(C) Directly or by contract, to 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) 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 you need any additional information in connection with this self-certification. Thank you for your attention to this matter.

Very truly yours,

DICKINSON WRIGHT PLLC

By: _____
Scott A. Holcomb

SAH/clw

cc: Paul Gardner, Director, Utility Services Department Town of Queen Creek
Doug Toy

PHOENIX 53749-32 441975v1

APPENDIX C STAKEHOLDER LETTERS

A Stakeholder meeting was held on February 13, 2018. The table below lists the invited stakeholders and their attendance of the meeting.

CAG Stakeholder	Representative	Attended Meeting	Did not Attend Meeting
Arizona State Land Department	Michelle Green (by phone)	X	
Town of Queen Creek	Paul Gardner Darren Farar Doug Toy (CH2M)	X	
Arizona Department of Environmental Quality	Edwina Vogan	X	
CAG	Travis Ashbaugh	X	
Johnson Utilities			X
Superstition Mountains Community Facilities District No. 1	Darron Anglin Paul Gardner	X	
Apache Junction Water District	Frank Blanco	X	
Pinal County	Atul Shah		X
City of Mesa	Kathy Macdonald	X	

Note: Per the CAG 208 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."*

Douglas A. Ducey
Governor

Arizona State Land Department
1616 West Adams, Phoenix, AZ 85007
(602) 542-4631

Lisa A. Atkins
Commissioner

February 7, 2018

Alan Urban, Community Development Manager
Central Arizona Association of Governments
1075 S. Idaho Road, Suite 300
Apache Junction, AZ 85119

Re: Town of Queen Creek proposed 208 Amendment

The Arizona State Land Department (the "Department") met with the Town of Queen Creek, and reviewed an amendment to the CAG 208 Water Quality Management Plan to be discussed at the February 13, 2018 meeting of Stakeholders.

The Department determined that there are several benefits to the sewer servicing plan the Town presents including:

- Planning for future development of the study area makes sense because the SR-24 will be extended to Ironwood in 2020 providing development opportunities for the area. The department would like to be in a position to maximize the value of that land when the market is ready.
- The plan includes sizing the infrastructure to accommodate future development of the State Trust Land.
- The capital improvement program includes funding to extend appropriately sized wastewater service lines to State Trust land.

For the reasons noted above the Department supports the 208 Amendment requested by the Town of Queen Creek. Should you have any questions please do not hesitate to contact Michelle Green, Project Manager via e-mail at mgreen@azland.gov or by phone at 602-364-2502.

Sincerely,

Wesley P. Mehl
Deputy Commissioner

APPENDIX C

City of Apache Junction

300 East Superstition Boulevard • Apache Junction, Arizona 85119 • www.ajcity.net

February 15, 2018

Central Arizona Governments
Attn: Alan Urban
2540 W Apache Trail #108
Apache Junction, AZ 85120

Re: Letter of Support for proposed Central Arizona Governments (CAG) 208 Water Quality Management Plan Amendment by the Town of Queen Creek

Mr. Urban,

The City of Apache Junction supports the proposed CAG 208 Plan Amendment by the Town of Queen Creek to expand its Designated Management Agency (DMA) boundary in Pinal County. Specifically, we support the DMA boundary expansion in the area from Meridian Road to the Central Arizona Project canal and from Frye Road to Queen Creek Road.

We applaud the Town's planning efforts and look forward to working with the Town of Queen Creek into the future. Please contact me if you have any questions or need additional information at (480) 474-5066.

Sincerely,

Bryant Powell
City Manager

APPENDIX C

SUPERSTITION MOUNTAINS COMMUNITY FACILITIES DISTRICT NO. 1
5661 South Ironwood Drive | Apache Junction, Arizona 85120
(480) 941-6754 | Fax (480) 671-3180 | www.smcfd.org

February 21, 2018

Central Arizona Governments
Attn: Alan Urban
2540 W Apache Trail #108
Apache Junction, AZ 85120

Re: Letter of Support for proposed Central Arizona Governments (CAG) 208 Water Quality Management Plan Amendment by the Town of Queen Creek

Mr. Urban:

Superstition Mountains Community Facilities District No. 1 (the "District") is sending this letter in support of the proposed CAG 208 Plan Amendment by the Town of Queen Creek to expand its Designated Management Agency boundary in Pinal County. Specifically the District supports the DMA boundary expansion in the area from Meridian Road to the Central Arizona Project canal and from Queen Creek Road to Frye Road.

Please contact me if you have any questions or need additional information at (480) 941-6760 or by e-mail at danglin@smcfd.org.

Sincerely,

Darron Anglin, PE
District Manager

Our mission is to provide a high quality public service reclaiming water at the lowest practical cost, while meeting the needs of our customers, ensuring public health and protecting the environment.

APACHE JUNCTION WATER DISTRICT

300 East Superstition Boulevard, Apache Junction, Arizona 85119
Mailing Address: P.O. Box 4768, Apache Junction, Arizona 85178-0014
Phone: (480) 982-6030
Fax: (480) 288-6623

February 22, 2018

Alan Urban, Community Development Manager
Central Arizona Association of Governments
1075 South Idaho Road, Suite 300
Apache Junction, AZ 85119

RE: Town of Queen Creek proposed 208 Amendment

I represented the Apache Junction Water District (AJWD) at the Town of Queen Creek's 208 Plan Amendment stakeholder meeting held on February 13, 2018 in Queen Creek, Arizona. A presentation given by Mr. Travis Ashbaugh about the proposed Designation Management Agency (DMA) area plan and amendment process provided succinct information. After attending the stakeholder meeting and reviewing the Draft Report, AJWD is in full support of the proposed amendment and CAG DMA Boundary expansion.

Please feel free to contact me via email or by phone if you have any questions regarding this matter.

Frank Blanco, Apache Junction Water District Director

Phone: (480) 474-8522
Email: fblanco@ajcity.net

Gregory Stanley
County Manager

PINAL COUNTY

March 12, 2018

Alan Urban
Community Development Manager
Central Arizona Governments
2540 W. Apache Trail, Suite 108
Apache Junction, AZ 85219

Re: Town of Queen Creek's CAG 208 Areawide Water Quality Management Plan Amendment to expand their Designated Management Agency (DMA) Boundary

Dear Mr. Urban:

This constitutes Pinal County's comment/response with respect to the application by the Town of Queen Creek. The application is requesting an amendment to the CAG 208 Areawide Water Quality Plan to allow expansion of their Designated Management Agency (DMA) Boundary for wastewater services.

We wish to compliment the Town of Queen Creek and their consultant on a clear, concise and thorough application and if approved, Pinal County will continue to collaborate with the town to ensure employment related land uses are planned and preserved along the major transportation corridors within this expansion area.

Pinal County supports the Town of Queen Creek's efforts to obtain a CAG 208 Amendment to expand their DMA and recommends approval of their application.

Should you have any further questions or concerns, please contact me.

Sincerely,

Himanshu Patel
Director

COMMUNITY DEVELOPMENT
31 North Pinal Street, Building F, PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

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mesa·az

20 E Main St Suite 750
PO Box 1466
Mesa, Arizona 85211-1466

mesaaz.gov

March 12, 2018

Alan Urban, Community Development Manager
Central Arizona Governments
2540 W. Apache Trail, Ste. 208
Apache Junction, AZ 85120

Subject: Letter of objection to the Town of Queen Creek proposed 208 amendment

The City of Mesa participated in the February 13, 2018 Central Arizona Governments stakeholder meeting to discuss the Town of Queen Creek's proposed 208 amendment to establish a sewer planning area east of Meridian Road in Pinal County. After reviewing the proposal and presentation, Mesa has concerns regarding Queen Creek's proposal:

- Establishing municipal sewer east of Meridian Road and north of Germann Road would encourage further encroachment of residential development on Mesa's established heavy industrial corridor west of Meridian Road.
- The Phoenix-Mesa Gateway Airport is overburdened by surrounding dense residential development. Further development in this area would negatively impact the airport and its flight operations.
- The lack of coordinated planning by the Town of Queen Creek with neighboring jurisdictions before starting the 208 amendment process does not convey regional cooperation or consideration for potential negative impact on Mesa.
- The City of Mesa has the capacity to provide wastewater service to the area, eliminating the need for any septic systems. Mesa intends to submit a 208 amendment proposal for the same area proposed by Queen Creek.

The City of Mesa understands that the 208 amendment process does not approve land use and only grants the Town of Queen Creek expansion of their Designated Management Agency and the authority to plan a sewer service area. However, approval of the proposed 208 amendment sets in motion a process whereby residential development would directly threaten the operations and prosperity of existing Mesa businesses and future commercial economic development in this natural employment corridor. The City of Mesa does not support development that is not compatible with established adjacent land uses in Mesa.

For these reasons, the City of Mesa objects to the Town of Queen Creek's 208 amendment proposal. Please contact Kathy Macdonald, Water Resources Department at (480) 644-4364 or kathy.macdonald@mesaaz.gov with any questions and further coordination in the stakeholder process.

Sincerely,

John Giles, Mayor

Kevin Thompson, Councilmember, District 6

480 644 2388 (tel)
480 644 2175 (fax)

APPENDIX D LEGAL DESCRIPTIONS

The current CAG DMA boundaries are shown in Table D-1.

Table D-1
Current CAG DMA Boundary Description

Section	Includes	Township	Range
19	All	2S	8E
30	All	2S	8E
1	Portions	3S	6E
12	Portions	3S	6E
13	Portions	3S	6E
24	Portions	3S	6E
3	All	3S	7E
4	Portions	3S	7E
5	Portions	3S	7E
6	All	3S	7E
7	All	3S	7E
8	Portions	3S	7E
9	Portions	3S	7E
17	Portions	3S	7E
18	Portions	3S	7E
19	Portions	3S	7E
20	Portions	3S	7E

The proposed CAG DMA boundary expansion includes the following sections:

- T1S, R8E: south half of section 31, south half of section 32, south half of section 33, and south half of 34 (land west of CAP canal)
- T2S, R8E: Sections 3, 4, 5, 6 (land west of CAP canal), 7, 8, 9, and 10 (land west of CAP canal

APPENDIX E RECORD OF PUBLIC PARTICIPATION

To be provided by CAG after Regional Council (assuming proposal was approved) to be inserted here before the plan is sent to the State Water Quality Management Working Group.

APPENDIX F COMMUNICATIONS

RECEIVED MAR 1 5 2018

Pinal County Board of Supervisor District 2

Mike Goodman

731 W Red Fern Rd

San Tan Valley, AZ 85140

I am writing in opposition to Queen Creek's application for sewer service North of German and East of Meridian on State Trust land. I feel all options as to the provider of services for this area needs to be evaluated. This region has the potential for a major industrial area mirroring the efforts of the City of Mesa. With the proximity of Gateway Airport this can be a major hub for employment centers for our citizens within this part of the County. Apache Junction, what is known as San Tan Valley and Queen Creek will benefit greatly as we plan appropriately.

Since being in office for over a year I have witnessed what "knee jerk" planning does. Myself and the citizens of my district have been dealing with the effects of that process. This must stop!

As we spend the time to have open discussions, looking at all interested parties to provide utility services to this area it may be determined that Queen Creek may be the best to service this area. CAG needs to look at this abjectly and not rush into this agreement as of yet.

Sincerely,

Mike Goodman

Supervisor for Pinal County District 2

APPENDIX F

August 28, 2018

Mayor Al Gameros
Central Arizona Governments
2540 West Apache Trail Suite 108
Apache Junction, Arizona 85120

Dear Chair Gameros:

This letter is sent in regards to the Town of Queen Creek's application for a 208 Water Quality Permit through CAG. While I recognize Pinal County has already provided a letter of support for the Town's application, as an individual member of the Board, I had previously submitted a letter of opposition to the Town's application.

As I have learned more about the Town's intent for utilities in this area of the County, their ongoing cooperation with Pinal County and area land owners, I am now confident that Queen Creek is the best option for consolidated utilities. To this end, I am rescinding my letter of opposition to the Town of Queen Creek's 208 amendment application and throw my support behind the Town.

Queen Creek and Pinal County have a number of projects where there is significant collaboration and I believe utilities, transportation and land use planning cooperation will continue in this vain. I look forward to continuing to work with the Town on the concerns I had originally raised related to land use.

Please feel free to contact me if you have any questions or if you would like additional information on my correspondence.

Sincerely,

Mike Goodman
Supervisor, Pinal County District 2

APPENDIX F

From: Kathy Macdonald
To: Travis Ashbaugh; Jamie Bennett
Subject: RE: Addition to Queen Creek 208 application
Date: Wednesday, August 22, 2018 10:27:48 AM
Attachments: image002.png

Pending the outcome of the IGA, it would be one in the same letter since they both signed the letter of objection. Thanks

From: Travis Ashbaugh <tashbaugh@cagaz.org>
Sent: Wednesday, August 22, 2018 10:23 AM
To: Kathy Macdonald <Kathy.Macdonald@mesaaz.gov>; Jamie Bennett <jamie.bennett@queencreek.org>
Subject: RE: Addition to Queen Creek 208 application

Thank you Kathy for keeping my updated. Is the Mayor and Councilman going to send a letter as well to withdraw the objection too?

Serving Regionally,

Travis Ashbaugh, AICP | Transportation Planning Manager
2540 W. Apache Trail #108 | Apache Junction, AZ 85120
Phone: (480) 474-9300 | FAX: (480) 474-9306

From: Kathy Macdonald [mailto:Kathy.Macdonald@mesaaz.gov]
Sent: Wednesday, August 22, 2018 10:20 AM
To: Jamie Bennett <jamie.bennett@queencreek.org>; Travis Ashbaugh <tashbaugh@cagaz.org>
Subject: RE: Addition to Queen Creek 208 application

Hi Travis and Jamie,

Mesa will officially withdraw our objection to the Queen Creek 208 Plan Amendment once the Queen Creek IGA is finalized. Scott Butler is keeping me posted on the IGA.
Thanks so much,

Kathy Macdonald
Business Development & Communications
City of Mesa Water Resources
(480) 644-4364 kathy.macdonald@mesaaz.gov

From: Jamie Bennett <jamie.bennett@queencreek.org>
Sent: Tuesday, August 21, 2018 6:35 PM
To: Travis Ashbaugh <tashbaugh@cagaz.org>
Cc: Alan Urban <aurban@cagaz.org>; Andrea Robles <ARobles@cagaz.org>; Darren Farar <darren.farar@queencreek.org>; Hoogesteijn von Reitzenstein, Natalia/PHX <Natalia.HoogesteijnvonReitzenstein@jacobs.com>; John Kross <john.kross@queencreek.org>; Kathy Macdonald <Kathy.Macdonald@mesaaz.gov>; Paul Gardner <paul.gardner@queencreek.org>; Toy, Doug/PHX <Doug.Toy@jacobs.com>
Subject: Re: Addition to Queen Creek 208 application

APPENDIX G MAPS

The following table lists the figures in Appendix G:

Figure	Description
G-1	Town of Queen Creek Municipal Planning Area
G-2	Current and Proposed DMA Boundaries
G-3	Existing Sewer Service Area with Sewer Mains, GWRP and Discharge Point
G-4	Nearby CAG DMAs and WMUs
G-5	Current and Proposed DMA Boundaries with Sections

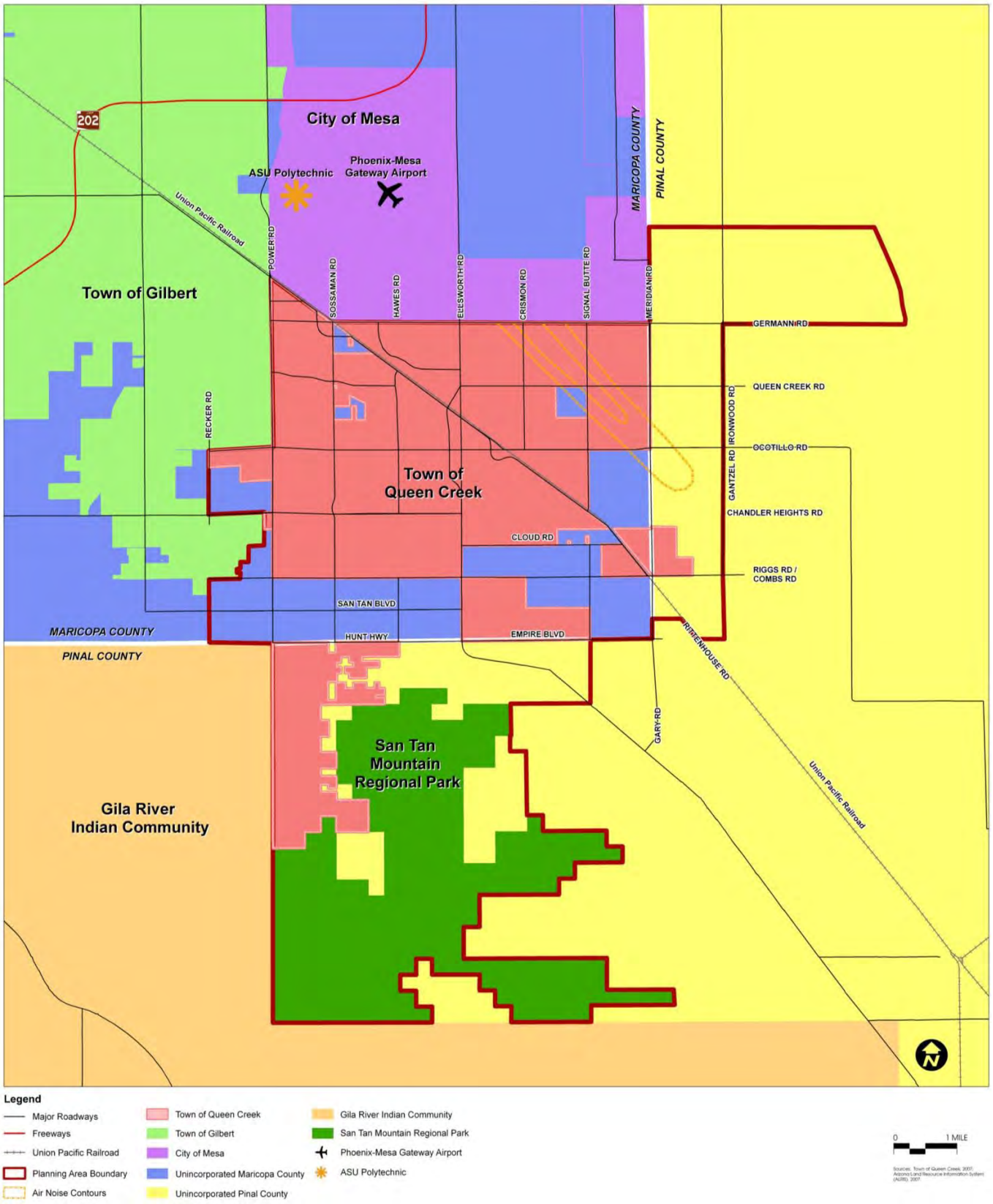

Figure G-1 Town of Queen Creek Municipal Planning Area

Figure G-2 Town of Queen Creek, Current and Proposed DMA Boundaries

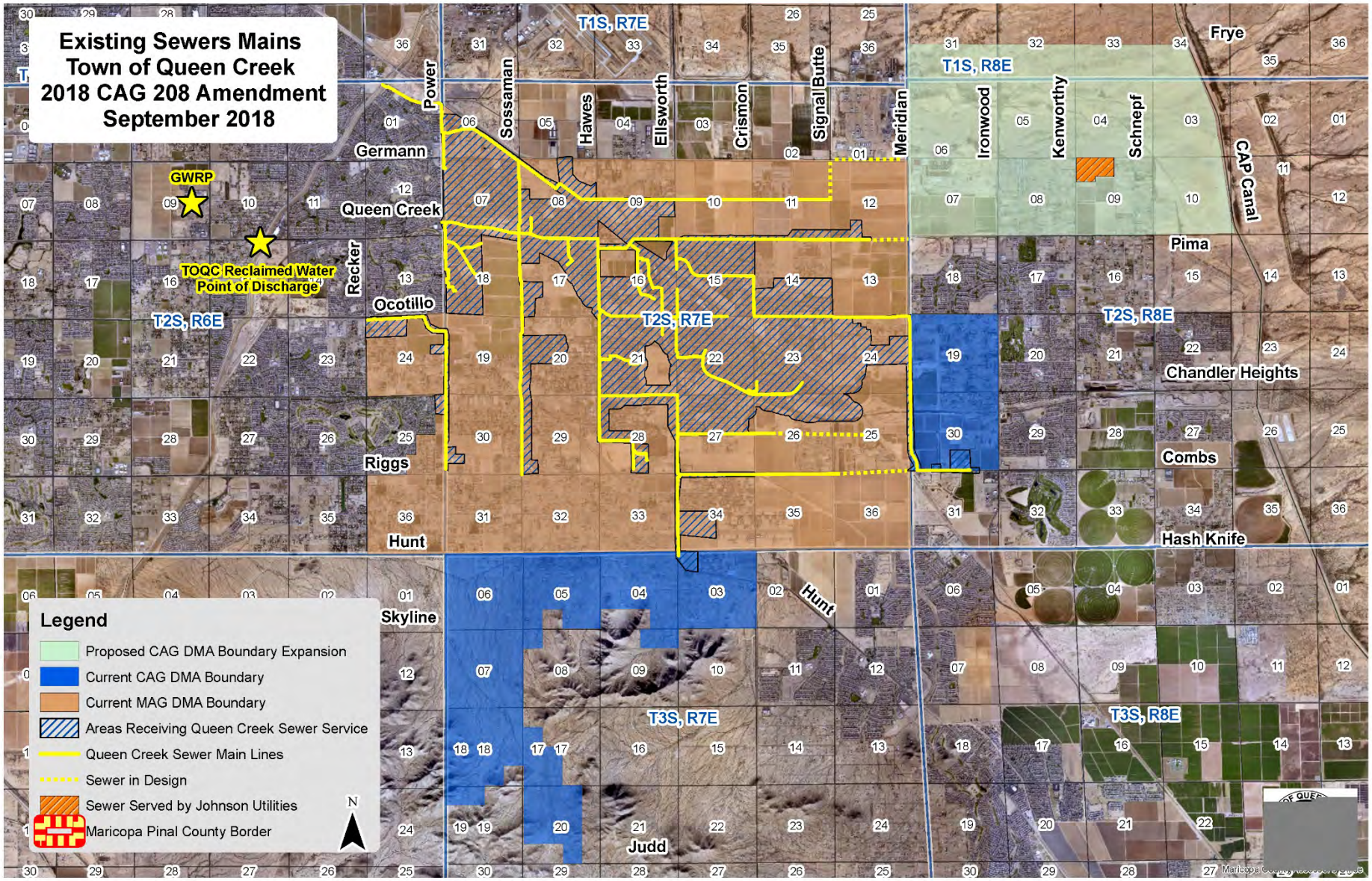

Figure G-3. Town of Queen Creek, Existing Sewer Mains

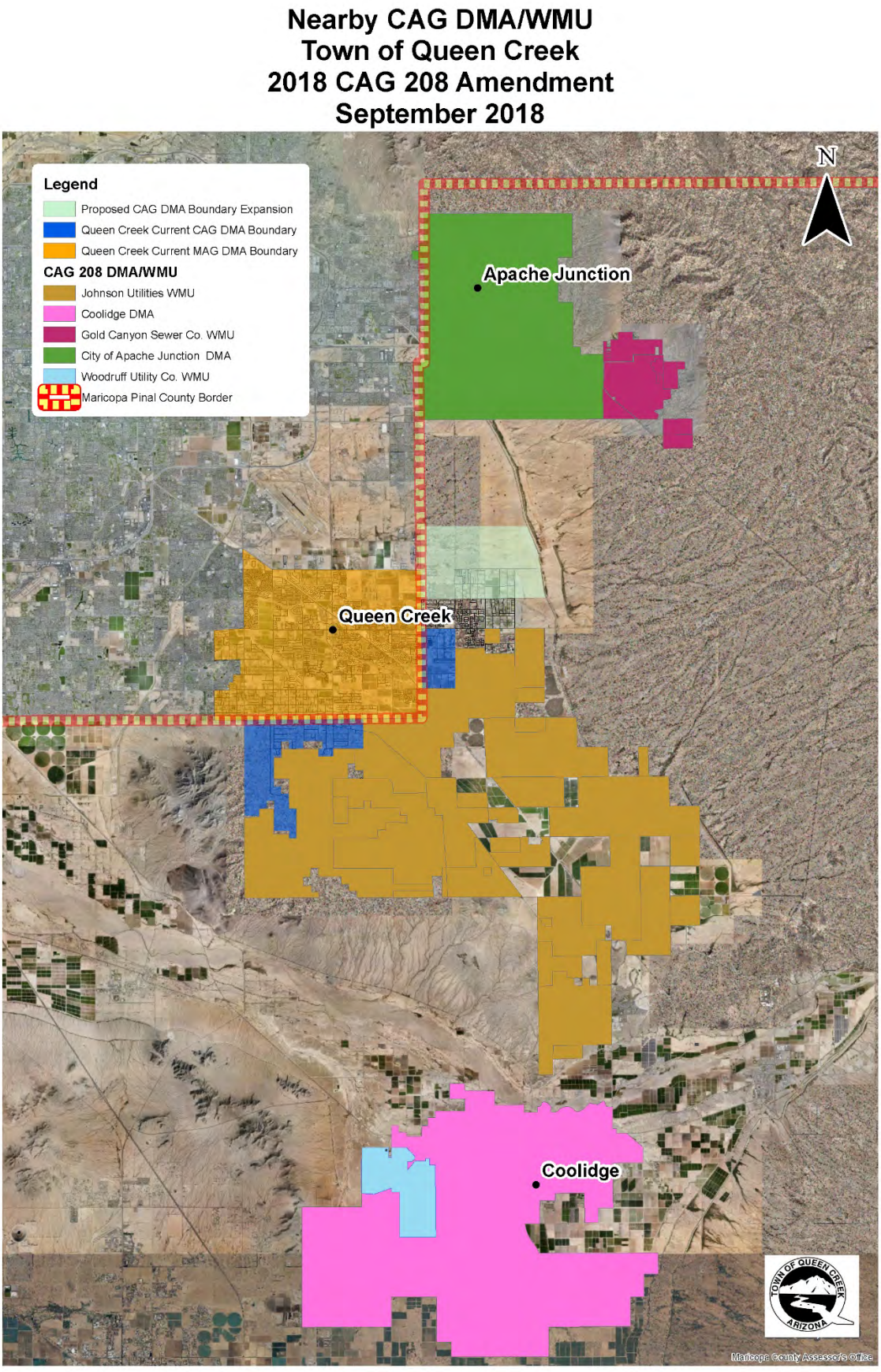

Figure G-4. Town of Queen Creek Nearby CAG DMAs

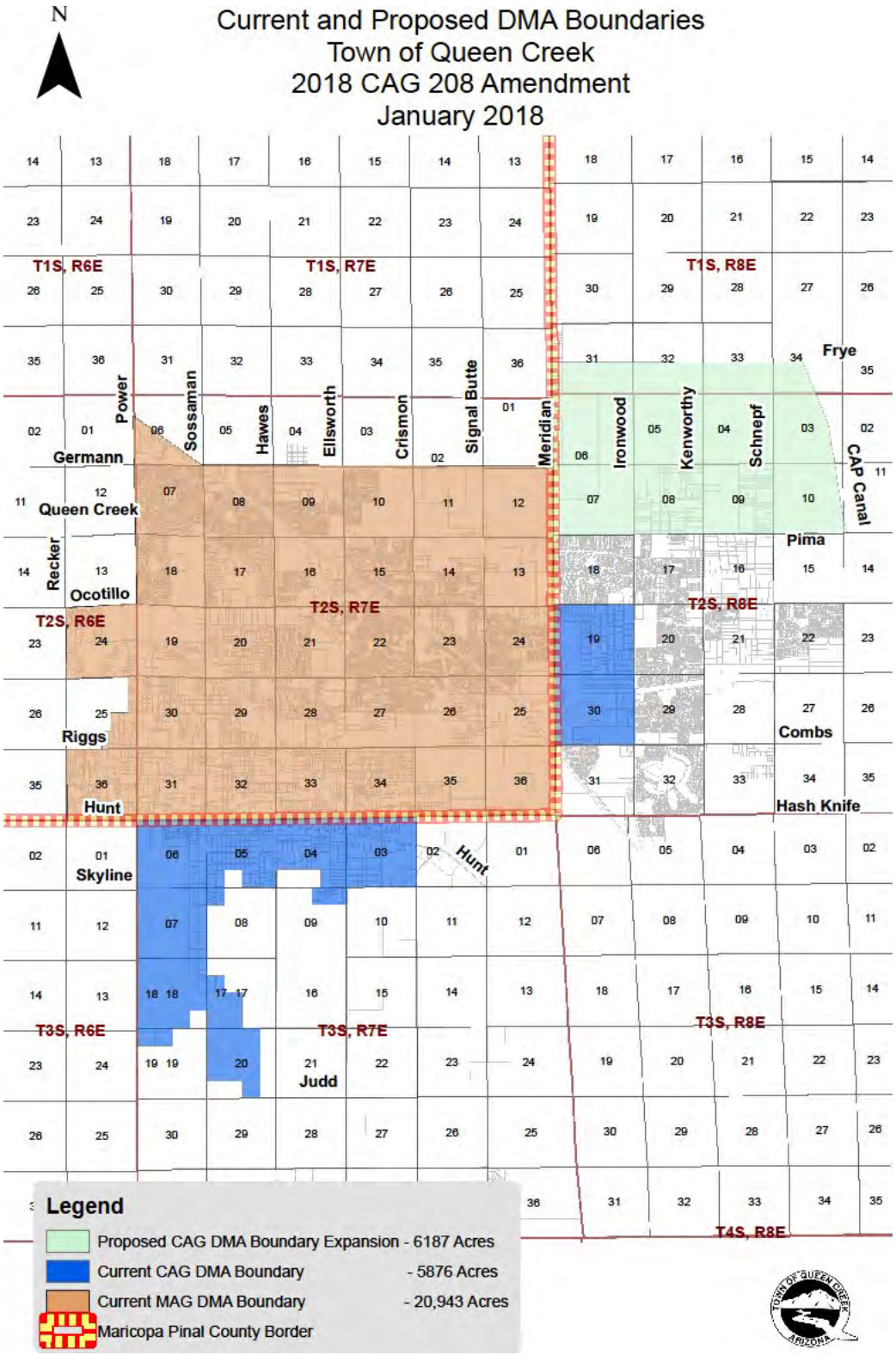

Figure G-5. Town of Queen Creek, Current and Proposed DMA Boundaries.