Maricopa Association of Governments
208 Water Quality Management Plan
Amendment Application

HUC Northeast Service Area
May 2007

Prepared for:
Global Water Resources, LLC
21410 N. 19th Avenue, Suite 201
Phoenix, Arizona 85027
Phone (623) 580-9600
Fax: (623) 580-9659

Global Water
Reliable - Renewable - Reusable

DSWA
# Hassayampa Utility Company Northeast Service Area MAG 208 Amendment

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>AUTHORITY</td>
<td>1-1</td>
</tr>
<tr>
<td>2.0</td>
<td>OVERVIEW</td>
<td>2-1</td>
</tr>
<tr>
<td>3.0</td>
<td>BACKGROUND AND SUMMARY</td>
<td>3-1</td>
</tr>
<tr>
<td>4.0</td>
<td>HUC NORTHEAST SERVICE AREA</td>
<td>4-1</td>
</tr>
<tr>
<td>4.1</td>
<td>CAMPUS 1 WRF</td>
<td>4-2</td>
</tr>
<tr>
<td>4.2</td>
<td>CAMPUS 2 WRF</td>
<td>4-3</td>
</tr>
<tr>
<td>4.3</td>
<td>CAMPUS 3 WRF</td>
<td>4-3</td>
</tr>
<tr>
<td>4.4</td>
<td>CAMPUS 4 WRF</td>
<td>4-4</td>
</tr>
<tr>
<td>5.0</td>
<td>PROJECTED POPULATION AND WASTEWATER FLOWS</td>
<td>5-1</td>
</tr>
<tr>
<td>6.0</td>
<td>EXISTING AND PROPOSED WATER RECLAMATION FACILITIES</td>
<td>6-1</td>
</tr>
<tr>
<td>6.1</td>
<td>EXISTING FACILITIES</td>
<td>6-1</td>
</tr>
<tr>
<td>6.2</td>
<td>INFLUENT WASTEWATER CHARACTERISTICS</td>
<td>6-2</td>
</tr>
<tr>
<td>6.3</td>
<td>PROPOSED FACILITIES</td>
<td>6-2</td>
</tr>
<tr>
<td>6.4</td>
<td>BENEFITS OF A STANDARD MODULAR DESIGN</td>
<td>6-3</td>
</tr>
<tr>
<td>6.5</td>
<td>TREATMENT PLANT STARTUP PROCEDURE</td>
<td>6-4</td>
</tr>
<tr>
<td>7.0</td>
<td>EFFLUENT MANAGEMENT</td>
<td>7-1</td>
</tr>
<tr>
<td>7.1.1</td>
<td>Campus 1 WRF</td>
<td>7-5</td>
</tr>
<tr>
<td>7.1.2</td>
<td>Campus 2 WRF</td>
<td>7-5</td>
</tr>
<tr>
<td>7.1.3</td>
<td>Campus 3 WRF</td>
<td>7-6</td>
</tr>
<tr>
<td>7.1.4</td>
<td>Campus 4 WRF</td>
<td>7-6</td>
</tr>
<tr>
<td>8.0</td>
<td>REQUIRED PERMITS</td>
<td>8-1</td>
</tr>
<tr>
<td>8.1</td>
<td>SECTION 208 PLAN AMENDMENT</td>
<td>8-2</td>
</tr>
<tr>
<td>8.2</td>
<td>AQUIFER PROTECTION PERMIT (APP)</td>
<td>8-2</td>
</tr>
<tr>
<td>8.3</td>
<td>RECLAIMED WATER REUSE PERMIT</td>
<td>8-2</td>
</tr>
<tr>
<td>8.4</td>
<td>USF/WS PERMITS</td>
<td>8-2</td>
</tr>
<tr>
<td>8.5</td>
<td>AZPDES/NPDES PERMIT</td>
<td>8-3</td>
</tr>
<tr>
<td>8.6</td>
<td>SLUDGE MANAGEMENT</td>
<td>8-3</td>
</tr>
<tr>
<td>8.7</td>
<td>AZPDES STORM WATER POLLUTION PREVENTION</td>
<td>8-4</td>
</tr>
</tbody>
</table>
8.8 LOCAL FLOODPLAIN AND DRAINAGE REGULATIONS .............................................. 8-4
8.9 CONSTRUCTION PERMITS (404/401 PERMITS) ...................................................... 8-4
8.10 AIR QUALITY PERMIT .......................................................................................... 8-5
8.11 NON-POINT SOURCE PERMITS ........................................................................... 8-5
8.12 APPROVAL TO CONSTRUCT/APPROVAL OF CONSTRUCTION ......................... 8-5
8.13 SPECIAL USE PERMIT ......................................................................................... 8-5

9.0 CONSTRUCTION OF WATER RECLAMATION FACILITIES ............................... 9-1
9.1 CAMPUS 1 WRF ................................................................................................. 9-1
9.2 CAMPUS 2 WRF ................................................................................................. 9-2
9.3 CAMPUS 3 WRF ................................................................................................. 9-2
9.4 CAMPUS 4 WRF ................................................................................................. 9-3

10.0 ENVIRONMENTAL IMPACTS/BENEFITS .............................................................. 10-1

11.0 FINANCIAL INFORMATION ................................................................................. 11-1

12.0 IMPACTS AND IMPLEMENTATION ..................................................................... 12-1
12.1 IMPLEMENTATION PLAN .................................................................................... 12-1
12.2 IMPACTS OF THE PROPOSED PLAN ................................................................. 12-3

13.0 PUBLIC PARTICIPATION ....................................................................................... 13-1

LIST OF FIGURES

Figure 7-1 Composition of Land Usage in a Representative 1 Square Mile ..................... 7-2
Figure 7-2 Reclaimed Water Disposition Plan for HUC .................................................. 7-3
Figure 7-3 Yearly Consumption Curve for a Representative 1 Square Mile .................... 7-4
Figure 7-4 Distribution of Reclaimed Water ................................................................ 7-5

LIST OF TABLES

Table 2-1 WRF Status .................................................................................................. 2-3
Table 3-1 WRF Buildout Capacity and AzPDES/NPDES Receiving Bodies ................. 3-1
Table 4-1 Campus 1 WRF Phasing ............................................................................. 4-2
Table 4-2 Campus 2 WRF Phasing ............................................................................. 4-3
Table 4-3 Campus 3 WRF Phasing ............................................................................. 4-4
Table 4-4 Campus 4 WRF Phasing ............................................................................. 4-4
Table 4-5 Wastewater Flow Projections within HUC NE service area ......................... 4-5
Table 5-1 Wastewater Flows Generated ..................................................................... 5-3
Table 6-1 Influent Wastewater Characteristics ............................................................ 6-2
Table 7-1 WRF Buildout Capacity and AzPDES/NPDES Receiving Bodies .................. 7-6
Table 8-1 AzPDES Receiving Bodies .......................................................................... 8-3
Table 9-1 Hassayampa Utility Company – Campus 1 WRF – Construction Phases ....... 9-2
Table 9-2  Hassayampa Utility Company – Campus 2 WRF – Construction Phases ........................................ 9-2
Table 9-3  Hassayampa Utility Company – Campus 3 WRF – Construction Phases ........................................ 9-3
Table 9-4  Hassayampa Utility Company – Campus 4 WRF – Construction Phases ........................................ 9-3
Table 12-1  HUC Campus 1 WRF – Construction Phases ................................................................. 12-1
Table 12-2  HUC Campus 2 WRF – Construction Phasing .............................................................. 12-2
Table 12-3  HUC Campus 3 WRF – Construction Phasing .............................................................. 12-2
Table 12-4  HUC Campus 4 WRF – Construction Phasing .............................................................. 12-2

LIST OF EXHIBITS

Exhibit 1  Vicinity Map
Exhibit 2  Aerial Photograph with Municipal Planning Area
Exhibit 3  Developers in HUC NE Service Area with Existing or Pending Agreements with Global
Exhibit 4  Water Reclamation Facility Location Map
Exhibit 5  Sewer Collection System
Exhibit 6  Water Reclamation Facilities, Recharge and Discharge Sites
Exhibit 7  Typical WRF Layout
Exhibit 8  Process Flow Diagram Typical WRF
Exhibit 9  Letter to Arizona Department of Environmental Quality

LIST OF APPENDICES

Appendix A  Development Agreements and Requests for Service Letters
Appendix B  HUC and WUGT Existing and Proposed Sewer and Water CC&N Boundary Maps
Appendix C  DMA Checklist
Appendix D  Legal Description with Exhibit for Campus 1, 2, 3 and 4 Sites
Appendix E  Regulations for Individual Sewage Systems and Septic Systems
Appendix F  Letters of Credit from JP Morgan and Wells Fargo
Appendix G  Illustration of Lift Station at Future Campus 3 and Infrastructure to Campus 2
Appendix H  Illustration of Infrastructure to Campus 2 from Belmont
Appendix I  Maricopa County Sponsorship Letter
Appendix J  Town of Buckeye Letter
1.0 AUTHORITY

In accordance with Section 208 of the Clean Water Act, the Maricopa Association of Governments (MAG) is the designated Regional Water Quality Management Planning Agency for Maricopa County, Arizona. The 208 Amendment Checklist for completion of the request for amendment is located at the end of this document. The Maricopa County Environmental Services Department letter of support is included in Appendix I.
2.0 OVERVIEW

This document is an application for an Amendment to the Maricopa Association of Governments (MAG) Clean Water Act Section 208 Areawide Water Quality Management Plan (WQMP) for Hassayampa Utility Company, Incorporated (HUC), a wholly owned subsidiary of Global Water Resources, Incorporated (Global or Global Water). This amendment provides planning information for four (4) water reclamation facilities (WRFs), as well as reuse, recharge, and discharge of Class A+ reclaimed water. The ultimate capacities of Campus 1 WRF, Campus 2 WRF, Campus 3 WRF and Campus 4 WRF will be 9 million gallons per day (mgd), 10 mgd, 12 mgd and 14 mgd, respectively. The combined capacity of the facilities will be 45 mgd. The planning area, to be known as the HUC Northeast Service Area (HUC NE), is located in western Maricopa County as shown in Exhibit 1. An aerial photograph of the planning area is shown in Exhibit 2.

Maricopa County Environmental Services Department (MCESD) has indicated that they would prefer to review a regional planning approach for this area incorporating the development of several master planned communities within a consolidated utility service approach. Global, with this amendment application, will demonstrate that such a regional perspective may be obtained and that there is considerable support for these activities throughout the development community. In response to ongoing planning activities with various developers throughout the area that have requested HUC service, Global is able to plan for integrated water, wastewater, and reclaimed water services for the HUC NE.

As such, the planned developments and wastewater treatment facility noted in the current MAG 208 Water Quality Management Plan within the proposed service area (Belmont) would be incorporated into the HUC NE service area. The development agreement between Belmont and Global is included in Appendix A.

Global will provide infrastructure services to the development community through the extension of service via Certificates of Convenience & Necessity (CC&N) regulated by the Arizona Corporation
Commission (ACC). Exhibit 3 shows the developments that have requested wastewater and reclaimed water service, and have or are preparing development agreements with Global.

Global is a Phoenix-based aggregator of small and medium-sized regulated utility companies. 39 HUC, a new wastewater utility, was formed in 2005. HUC, a wholly-owned subsidiary of Global, filed an application for a CC&N with the ACC for wastewater on September 19, 2005 (Docket No. SW-20422a-05-0659). The application covered a service area of approximately 2,050 acres encompassing the Hassayampa Ranch development. The CC&N extension was approved in September 2006.

Additionally, HUC filed an extension application for wastewater on September 7, 2006, docket number SW-20422-06-0566 to incorporate the Belmont and 339th Avenue developments encompassing 20,454 acres. Global’s subsidiary Water Utility of Greater Tonopah (WUGT) currently has CC&N to serve water to the Hassayampa Ranch development, and has filed an extension application for water with the ACC in September 2006 to service the Belmont and 339th Avenue developments.

The existing and proposed CC&N Extension for HUC and the Water Utility of Greater Tonopah (WUGT), a Global subsidiary, are included in Appendix B for reference. The CC&N areas, shown in Appendix B, are smaller than the 208 Plan service area, in that it is a sub-set of that area’s regional plan. The ACC has, based on precedent in the last several years, required landowner requests for service to a utility before it would consider granting a CC&N to that utility. In addition, the development boundaries most of us are familiar with include State Land under planning by those developers, even though agreements with the State Land Department have not necessarily been forged. Therefore, in the example of Belmont, there are several full sections of State Land currently included in Belmont’s planning exhibits and documents, but the actual property currently within the ownership and/or legal control of the Belmont developers is the only property that Global included in its recent CC&N extension.

As a regulated utility, HUC’s service areas are governed by statute and the ACC. Expansion into areas not presently included in the company’s current CC&N application will be made to the ACC to obtain CC&N extensions as the property owners directly request sewer service from HUC.
Global/HUC has adequate authority to perform the functions enumerated at Section 208(c)(2)(A)-(I), 33 U.S.C. § 1288(c)(2)(A)-(I) in the Northeast Service Area. The required documentation detailing this authority is provided in Appendix C.

The boundary of the service area covered by this amendment application extends from the Central Arizona Project (CAP) canal on the north to Buckeye Road on the south and from the Baiterra Development and 363rd Avenue on the west to the Town of Buckeye Municipal Planning Boundary (MPA) on the east. The service area comprises approximately 63.6 square miles in unincorporated Maricopa County. In order to meet the phasing and reclaimed water distribution requirements, and minimize the number of ancillary lift stations, four facilities are proposed to economically and efficiently treat wastewater to Class A+ standards. The water reclamation facility locations are shown in Exhibit 4.

To optimize infrastructure the HUC WRFs will be built in phases, depending on the pace and location of the development activity. In the first five years only two WRFs, likely Campuses 1 and 2, may be required to service the developing areas, before the third WRF may be required. All flows generated in the service area will be treated to meet Class A+ Reclaimed Water Quality Standards (RWQS) as defined by Arizona Administrative Code (A.A.C.), Title 18, Chapter 11. Table 2-1 shows the current status of WRFs within the service area.

<table>
<thead>
<tr>
<th>HUC NE Service Area</th>
<th>Water Reclamation Facility</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUC NE Service Area</td>
<td>Campus 1</td>
<td>New</td>
</tr>
<tr>
<td>HUC NE Service Area</td>
<td>Campus 2</td>
<td>New</td>
</tr>
<tr>
<td>HUC NE Service Area</td>
<td>Campus 3</td>
<td>New</td>
</tr>
<tr>
<td>HUC NE Service Area</td>
<td>Campus 4</td>
<td>New</td>
</tr>
</tbody>
</table>

The reclaimed water from all the WRFs will be used for beneficial reuse (common-area irrigation, golf course irrigation, industrial/commercial applications (if available), residential irrigation, residential non-potable use), recharge to the aquifer, and/or discharged under Arizona/National Pollutant Discharge Elimination System (AzPDES/NPDES) permits. Beneficial reuse includes irrigation of turf at various...
points throughout the service area, direct sales to reuse customers, construction water use, industrial (if available) and commercial reuse. During the early stages of development, HUC may contract with farmers to use the Class A+ reclaimed water on agricultural crops.

Global is aware that there may be groundwater quality issues in the service area due to historical agricultural land usage and/or natural geophysical conditions. Because the Aquifer Protection Permit (APP) to be obtained for each WRF specifies that reclaimed water must meet Aquifer Water Quality Standards (AWQS) at the point of compliance, any recharge to the aquifer will serve to improve the groundwater quality in this region.

Although the addition of the Hassayampa Ranch WRF (Campus 1 WRF) into the MAG 208 Water Quality Management Plan has not yet been approved, Global has proceeded with the Aquifer Protection Permit application process for the Hassayampa Ranch WRF. As part of the APP application submitted for the HUC Hassayampa Ranch WRF, Global commissioned a hydrologic study that identified regional aquifer water quality has been previously impacted by nitrates (NO₃ = 15 mg/L, MCL = 10 mg/L). Other parameters generally of concern in the employment of groundwater in Arizona appear to be very good:

Total dissolved solids (TDS) = 290 mg/L;

Arsenic = 0.00035 mg/L (MCL = 0.010 mg/L); and

Fluoride = 0.69 mg/L (MCL = 4 mg/L).

As a result, treatment may be required for nitrate, which would typically involve an adsorption technology as opposed to a rejection technology. Therefore, there would be no requirement to treat water residual streams in the wastewater process, and therefore the reclaimed water would not have any adverse effects from additional TDS or other constituents.

Further, Global’s corporate policy, as codified in Codes of Practice, is not to accept bulk brine wastes or any other waste streams that would affect the ability for the WRF to meet any permit criteria.
The effluent management plan, Section 7.0, describes the order of priority for the reuse of reclaimed water in the HUC NE service area. Discharges to various receiving water bodies including the Hassayampa River and other washes will occur infrequently, if at all. It is likely this effluent management option will be used only in winter months if heavy continuous rainfall or sustained cold temperatures drastically reduce reclaimed water consumption and/or recharge facility operations. In other words, discharge to these washes will be used as a last option for managing reclaimed water flows. When discharges are required, Global Water limits the discharge to the greatest extent possible. Discharges will meet the Surface Water Quality Standards (SWQS) prescribed in their AzPDES/NPDES permit, for which some parameters are more stringent than the AWQS.

Likewise, recharges to the aquifer will meet all AWQS prescribed in the APPs which govern these recharges. Recharge is an important element in Global’s effluent management plan, and is a necessary assured water supply strategy to ensure the viability of the water resources in the area. Global’s policy is to own the land on which recharge infrastructure is permitted and constructed, and thus recharge infrastructure is targeted for all WRF sites as well as water distribution centers owned by WUGT. In its APP application for Campus 1 WRF, recharge wells are identified and intended for permitting along with the WRF proper. Likewise, based on hydrologic investigation at the other WRFs and other properties owned by Global, recharge infrastructure will be sited, sized and permitted. Underground Storage Facility (USF) and Water Storage (WS) permits will also be pursued for all recharge facilities. Finally, based on HUC’s pre-application meeting with ADWR on the USF and WS for Campus 1, HUC does not currently plan to pursue a managed or constructed discharge in the water of the U.S. such as the Hassayampa River because of the intermittent and relative emergency nature of the need to discharge.

Because Global is providing water, wastewater and reclaimed water services, integrated water resource management is possible in this part of the fast-growing west valley region. Because of this rapid growth, a traditional “groundwater only” approach to serving this region to meet its water needs is not adequate. Thus, water conservation is imperative. This has been demonstrated through the completion of the Hassayampa River Basin Hydrological Study, commissioned by the Town of Buckeye and various developers throughout the area. The conclusion that the Basin, without a concerted recharge and reclamation strategy cannot support the planned growth, speaks to the requirement to deploy a totally
integrated solution for the area. This application not only articulates, but demonstrates how Global mandates that integrated approach.

Groundwater conservation is achieved through the “triad of conservation”: (1) reusing reclaimed water for non-potable uses such as irrigating landscaping, construction water, water amenities and, ultimately, flushing toilets; (2) introducing renewable surface water sources to the maximum feasible extent; and (3) recharging excess reclaimed water and surface water into the aquifer to the maximum extent feasible. Global and its regulated utilities are recognized leaders in water conservation in Arizona. For example, through this “triad of conservation” strategy, Palo Verde Utilities Company and Santa Cruz Water Company (two affiliates of HUC) have achieved remarkable reductions, over 30%, in average groundwater use as compared to traditional providers in Pinal County. A comprehensive economic evaluation conducted by Global shows that reuse of reclaimed water is far more cost-effective than recharging this reclaimed water directly to the aquifer due to the cost savings from less groundwater pumping and treatment facilities costs. Further, because directly reusing the reclaimed water avoids the need to draw an equivalent amount from the groundwater, the net impact to the groundwater is exactly the same as recharging that reclaimed water into the aquifer. Accordingly, Global requires developers through its contract agreements to build integrated irrigation impoundments to accept and store reclaimed water that they then must use to irrigate open space areas like tot lots and medians, as well as to limit its turf area within those open spaces to 22%.

Global, through WUGT, will provide water service to the HUC NE service area and as such will be able to implement an important element of the “triad of conservation”: the use of renewable surface water sources to the maximum feasible extent. To this end, a surface water plant in the northern portion of Belmont at the CAP Canal is planned to ultimately provide half of the potable water source needs of the service area. Also of interest to the water resource management in this area is the 50,000 acre-ft/year CAP water recharge facility owned and permitted by another Global subsidiary, West Maricopa Combine, Inc. Currently, the facilities to recharge 25,000 acre-ft/year are operational. Construction of the second 25,000 acre-ft/year managed recharge facility is expected to be complete in early 2008. Groundwater quality and overall aquifer levels in the service area will be positively impacted by this Global recharge facility.
As can be seen throughout this 208 Amendment, Global is committed to supporting the growth of this service area in the most sensitive, sustainable manner to help protect the aquifer. Global’s triad of conservation approach will achieve a 30% or more reduction in the reliance on groundwater to meet the wet water demands of the HUC NE service area.
3.0 BACKGROUND AND SUMMARY

HUC will provide sewer and reclaimed water service to the service area, an area of approximately 63.6 square miles. Currently, development agreements between Global and various developers within the HUC NE Service Area are being or have been executed to ensure regional planning and centralized provision of wastewater and reclaimed water service for the long term. Copies of the development agreements including Request for Service letters are provided in Appendix A. Global is continuing to work with the remaining developers to complete development agreements between the parties.

The planning area, to be known as the HUC Northeast Service Area, located in western Maricopa County is shown in Exhibit 1. Exhibit 2 provides an aerial photograph of the planning area with the HUC NE service area and the Town of Buckeye Planning Area boundaries shown. Table 3-1 shows the WRF with its estimated build-out capacity, and potential reclaimed water discharge locations. The potential discharge locations are illustrated in Exhibit 6.

<table>
<thead>
<tr>
<th>Water Reclamation Facility</th>
<th>Buildout Capacity (mgd)</th>
<th>Receiving Bodies under AzPDES/NPDES Permit</th>
<th>Distance to Receiving Bodies from WRF (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>9</td>
<td>Hassayampa River</td>
<td>3,500</td>
</tr>
<tr>
<td>Campus 2</td>
<td>10</td>
<td>Hassayampa River</td>
<td>13,500</td>
</tr>
<tr>
<td>Campus 3</td>
<td>12</td>
<td>Dickey Wash</td>
<td>6,750</td>
</tr>
<tr>
<td>Campus 4</td>
<td>14</td>
<td>Phillips Wash</td>
<td>4,180</td>
</tr>
</tbody>
</table>

All the WRFs planned for the HUC NE Service Area will utilize Sequencing Batch Reactor (SBR) technology combined with filtration and disinfection to produce ADEQ Title 18 Class A+ reclaimed water. SBR treatment units are deployed at centralized locations in phases designed to meet the needs of...
development flows. These WRFs are patterned after our standardized facilities in the Palo Verde Utilities Company service area located in Maricopa, Arizona. With several years of operating experience, and a recent phased expansion from 1 mgd to 3 mgd, HUC will greatly benefit from Global’s success with this standardized approach.

The reclaimed water will be put to beneficial use to the greatest extent possible, including irrigation of open spaces, green spaces, HOA common areas, school grounds, construction water, etc. Integrated irrigation impoundments will be established at each development and HUC will require all developments to use reclaimed water for irrigation at least in their open spaces which make up 15% of their developments. Seasonally, as directed by demand, excess reclaimed water will be recharged to the aquifer under an APP and will be stored for credit via an Underground Storage Facility (USF) permit. As a last resort, reclaimed water may be discharged to ephemeral washes. The washes are Waters of the US (WUS) and thus will require an AzPDES/DPDES permit for discharge. These recharge and discharge locations are shown in the Exhibit 6. Additional recharge sites may be added at other Global properties including water distribution centers where necessary and feasible, and will be specifically permitted by the appropriate regulatory agencies.

This program of reclaimed water management provides for a reliable demand for reclaimed water, allowing for maximum reuse and minimal discharge. As the sewer collection system infrastructure will be constructed to optimize the use of existing facilities, the reclaimed water system will also be constructed so that:

- Reclaimed water production is located close to the demand to reduce operating costs.
- Reclaimed water demand can be met and delivery maximized within the HUC NE service area before having to recharge to the aquifer via permitted wells or recharge basins, or as a last resort, discharge to the washes.
4.0 HUC NORTHEAST SERVICE AREA

The service area comprises approximately 63.6 square miles in unincorporated Maricopa County. The HUC NE service area is bounded by the Central Arizona Project (CAP) canal on the north, the Balterra Development and 363rd Avenue on the west, Buckeye Road on the south, and the Hassayampa River and the Town of Buckeye Municipal Planning Boundary on the east. The service area boundary is shown on the Exhibits 1 and 2.

The HUC NE Service Area includes the Belmont development that is described in the 2002 MAG 208 Water Quality Management Plan. The HUC NE Service Area Amendment application will supersede the 2002 MAG Water Quality Management Plan with regards to Belmont. In addition to Belmont, the service area includes the Hassayampa Ranch and 330th Avenue Project developments along with other unnamed developments. Exhibit 3 shows the developments that have development agreements with Global or are in the process of preparing development agreements.

Flows from the service area will be treated in four WRFs located within its boundary. 13,28 Campus 1 and 2 WRFs will be built first to handle the flows from the proposed developments which can flow by gravity to these WRF campuses. 13,28 Campus 3 and 4 WRFs will be built as, and when, required depending on the development of that region. 10,16,18 Reclaimed water from all four WRFs will be used for beneficial reuse, which may include turf irrigation at various points throughout the service area, recharge under an USF permit to the aquifer, and/or discharge under an AzPDES/NPDES permit to numerous points throughout the HUC NE Service Area. HUC will use its reclaimed water infrastructure to supply treated water to multiple recharge and/or discharge sites. With the help of this infrastructure, reclaimed water demand can be met and delivery can be maximized across the service area. As discussed in greater detail in Section 7 of this application, HUC will require mandatory reuse from developers through reclaimed water infrastructure HUC will construct. Facilities will be available to recharge 100% of the reclaimed water either indirectly (reuse) or directly (recharge to aquifer).
Permitted discharges to Waters of the US are a last resort for disposition in the event that reuse and recharge facilities are temporarily unable to recharge 100% of the reclaimed water.

Reclaimed water in excess of reuse demand will be recharged into permitted wells or basins throughout the service area using the reclaimed water infrastructure. The implementation of multiple recharge facilities will provide flexibility of operation especially during the winter months and during periods of extended rainfall. Potential recharge and discharge sites are shown in the Exhibit 6. HUC plans to utilize the WRF setbacks for recharge facilities, as well as other sites owned by HUC or Global. The precise location of these sites is not known at this time but will be identified and incorporated into the APP and AzPDES/ NPDES permitting processes, as required. HUC will operate its reclaimed water systems to avoid standing water in washes when/if discharge is used for disposal.

4.1 Campus 1 WRF

Campus 1 WRF will be built to service the Hassayampa Ranch and approximately a third of Belmont. The Campus 1 WRF (aka Hassayampa Ranch WRF) will be located in the southeast quarter of Section 22, Township 2 North, Range 5 West and immediately west of the Hassayampa River (refer to Exhibit 4). The maximum capacity of the Campus 1 WRF is estimated to be 9 mgd at buildout. Table 4-1 provides the phasing of the Campus 1 WRF.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity, (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>5,720</td>
<td>2.0 Total (1.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>11,440</td>
<td>4.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>17,160</td>
<td>6.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2016</td>
<td>22,880</td>
<td>8.0 Total (2.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>24,600</td>
<td>9.0 Total (1.0 New)</td>
</tr>
</tbody>
</table>
Reclaimed water from the Campus 1 WRF will be used for beneficial reuse, including turf irrigation at various points within the service area, and recharge at the WRF or other sites owned by HUC/Global, under an APP and USF permit. As a last resort, reclaimed water will be discharged under an AzPDES/NPDES permit to the Hassayampa River during seasonal excesses as shown in Exhibit 6.

### 4.2 Campus 2 WRF

Campus 2 will be built to service the I-10 339th Avenue development as well as flows from the southern portion of Belmont. The Campus 2 WRF will be located in the southwest quarter of Section 8, Township 1 North, Range 5 West near the southern border of the HUC NE service border on Buckeye Road (refer to Exhibit 4). The maximum capacity of Campus 2 WRF is expected to be approximately 10 mgd at buildout. Table 4-2 shows the Campus 2 WRF phasing.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>5,720</td>
<td>2.0 Total (1.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>11,440</td>
<td>4.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>17,160</td>
<td>6.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2016</td>
<td>22,880</td>
<td>8.0 Total (2.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>28,600</td>
<td>10.0 Total (2.0 New)</td>
</tr>
</tbody>
</table>

Reclaimed water from the Campus 2 WRF will be used for beneficial reuse, which may include turf irrigation at various points throughout the service area, recharge at the WRF or other sites owned by HUC/Global under an APP and USF permit, and/or discharge under an AzPDES/NPDES permit to Dickey Wash and/or the Hassayampa River as shown in the Exhibit 6.

### 4.3 Campus 3 WRF

Campus 3 WRF will be built as and when required depending on the pace of the Belmont Development. The Campus 3 WRF will be located in the southwest quarter of Section 30, Township 2

---

U:\PROJECTS\060010 - Global Water West Hassayampa Master Plan\06 Permit\Area 1 208\Final - 051807\HUC NE Service Area MAG 208 - 052307.doc

Global Water
HUC NE Service Area MAG 208

Page 4-3
May 2007
North, Range 5 West as shown in the Exhibit 4. Flows at the Campus 3 WRF are estimated to be approximately 12 mgd at buildout. Table 4-3 shows the Campus 3 WRF phasing.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2012</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2014</td>
<td>8,580</td>
<td>3.0 Total (2.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>14,300</td>
<td>5.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2018</td>
<td>20,020</td>
<td>7.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2020</td>
<td>28,600</td>
<td>10.0 Total (3.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2022</td>
<td>34,320</td>
<td>12.0 Total (2.0 New)</td>
</tr>
</tbody>
</table>

Reclaimed water from the Campus 3 WRF will be used for beneficial reuse, which may include turf irrigation throughout the service area, recharge at the WRF or other sites owned by HUC/Global under an APP and USF permit, and/or discharge under an AzPDES/ NPDES permit to Dickey Wash and/or Phillips Wash as shown in the Exhibit 6.

4.4 Campus 4 WRF

Campus 4 will be built to service the Belmont Development. The Campus 4 WRF will be located in the southeast quarter of Section 14, Township 2 North, Range 6 West as shown in the Exhibit 4. Flows at the Campus 4 WRF are estimated to be approximately 14.0 mgd at buildout. Table 4-4 shows the Campus 4 WRF phasing.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2015</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2017</td>
<td>8,580</td>
<td>3.0 Total (2.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2019</td>
<td>14,300</td>
<td>5.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2021</td>
<td>20,020</td>
<td>7.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2023</td>
<td>28,600</td>
<td>10.0 Total (3.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2025</td>
<td>40,040</td>
<td>14.0 Total (4.0 New)</td>
</tr>
</tbody>
</table>
Reclaimed water from the Campus 4 WRF will be used for beneficial reuse, which may include turf irrigation, recharge at the WRF or other sites owned by HUC/Global under an APP and USF permit, or discharge under an AzPDES/NPDES permit to Phillips Wash as shown in the Exhibit 6.

Table 4-5 shows the expected wastewater flows generated within the HUC NE service area and its treatment location.

Table 4-5  Wastewater Flow Projections within HUC NE service area

<table>
<thead>
<tr>
<th>Area Served (sq. miles)</th>
<th>Equivalent Dwelling Units</th>
<th>Expected Wastewater Flows (mgd)</th>
<th>Water Reclamation Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.6</td>
<td>127,560</td>
<td>44.6</td>
<td>Campus 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>
5.0 PROJECTED POPULATION AND WASTEWATER FLOWS

Population projections were obtained from the MAG Interim Projections of Population, Housing, and Employment by Municipal Planning Area and Regional Analysis Zone dated July 2003. The total resident population in Maricopa County in 2000 was 3,096,600. In addition, POPTAC has projected the population in Maricopa County in 2010, 2020, and 2025 to be approximately 4,134,400, 5,164,100 and 5,664,000, respectively. The Northeast Service Area is included in the northern portion of the Maricopa Association of Governments (MAG) Regional Area Zone (RAZ) 346. The total resident population in RAZ 346 in 2000 was estimated to be 3,030. POPTAC has projected the population in the RAZ 346 in 2010, 2020, and 2025 to be approximately 3,925, 4,462 and 8,852, respectively. The population for the Town of Buckeye in 2000 was 16,700. The interim projection for resident population in the Town of Buckeye in 2010, 2020 and 2025 are 58,600, 153,400 and 275,500, respectively.

The population data indicates that the growth rate of the Town of Buckeye, located to the east of the service area, is much faster in comparison to the overall growth rate for Maricopa County and RAZ 346. For the HUC NE 208, the dwelling units per square mile were based on the development master plans for the Belmont, Hassayampa Ranch and 339th Avenue. The dwelling unit per square mile for these developments ranges from 1,987 to 2,131, or an average of approximately 2,000.

Belmont master planning estimates that its residential population in the Northwest 208 Service Area will be approximately 271,490 at buildout. Hassayampa Ranch master planning estimates its residential population of approximately 27,429 at buildout in approximately 2010. At buildout, the 339th Avenue development is projecting a population of 11,466. For the projected master-planned dwelling units and population (310,385) at buildout, the number of persons per dwelling unit is 2.94. The residential population for the portions of the Northeast Service Area outside of the master-planned communities is approximately 140,000 resulting in total residential population of approximately 450,000.
The POPTAC data estimated that for RAZ 346 in the Year 2000, the number of persons per dwelling unit is approximately 2.88. The POPTAC data estimated that for the Town of Buckeye in the Year 2000, the number of persons per dwelling unit is approximately 3.27. However, based on guidelines provided by Maricopa County Environmental Services Department, a person per dwelling unit factor of 3.5 was used to develop treatment capacity estimates for the Campuses.

For a 20-year planning period from Year 2000 to Year 2020, the POPTAC data estimates that, for RAZ 346, the number of dwelling units will increase by 47 percent. For a 20-year planning period Year 2000 to Year 2020, the POPTAC data estimates that for the Town of Buckeye the number of dwelling units will increase by 951 percent.

This report uses a planning density of 2,000 dwelling units per square mile and 350 gallons per day (gpd) per dwelling unit to establish the treatment capacity for the WRF, which includes an allowance for schools and commercial flows with a safety factor. Where population data is presented in this report, an average of occupancy of 3.5 persons per residence is assumed. The gallon per day per dwelling unit and the person per dwelling unit factors were required by Maricopa County Environmental Services Department.

Also, land that cannot be developed due to various zoning requirements including mountains, ridges, canals, washes, mines etc were included in the area used to develop conservative wastewater projections.

Table 5-1 shows the wastewater flow projection, based on the above mentioned density, flow rates and occupancy rates by land use.
Table 5-1  Wastewater Flows Generated

<table>
<thead>
<tr>
<th>Description</th>
<th>Campus 1 WRF EDUs</th>
<th>Campus 2 WRF EDUs</th>
<th>Campus 3 WRF EDUs</th>
<th>Campus 4 WRF EDUs</th>
<th>Total Equivalent Dwelling Units (EDU)</th>
<th>Flow (gal/unit/day)</th>
<th>Average Daily Flow (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>18,646</td>
<td>21,678</td>
<td>26,014</td>
<td>30,350</td>
<td>96,688</td>
<td>350</td>
<td>33,840,826</td>
</tr>
<tr>
<td>Commercial</td>
<td>4,970</td>
<td>5,778</td>
<td>6,934</td>
<td>8,090</td>
<td>25,772</td>
<td>350</td>
<td>9,020,148</td>
</tr>
<tr>
<td>School</td>
<td>467</td>
<td>542</td>
<td>651</td>
<td>759</td>
<td>2,419</td>
<td>350</td>
<td>846,699</td>
</tr>
<tr>
<td>State Land</td>
<td>517</td>
<td>601</td>
<td>721</td>
<td>842</td>
<td>2,681</td>
<td>350</td>
<td>938,326</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24,600</td>
<td>28,600</td>
<td>34,320</td>
<td>40,040</td>
<td>127,560</td>
<td>N/A</td>
<td>44,646,000 (44.6 mgd)</td>
</tr>
</tbody>
</table>

1. The residential, commercial, school, and state land breakdown is estimated.

Collection system infrastructure may be constructed to direct flow to an existing WRF that may have additional treatment capacity to delay the need to construct a new WRF or expand an existing WRF, as the economics of the overall system may dictate. Currently, Global plans to build Campus 1 WRF and Campus 2 WRF in 2008. Each facility will be designed to treat approximately one (1) mgd. In the event that development does not proceed at a pace consistent with the planned wastewater reclamation facility and infrastructure construction, Global has considered various options to modify their facility and infrastructure implementation plans. In doing so, they have incorporated flexibility into their planning efforts with an apparent consciousness to the capital cost of these facilities.

As illustrated in the attached exhibit (Appendix G), an example of the collection system infrastructure constructed in response to limited development growth would be as follows:

- Construct a lift station at the Campus 3 WRF site that can be slated for use as the future influent pump station at the Campus 3 WRF.

- From the Campus 3 Lift Station, construct the infrastructure necessary to convey wastewater to the Campus 1 WRF (Hassayampa Ranch WRF). Ultimately, the infrastructure could be used to convey wastewater to the Campus 3 WRF.

As illustrated in the attached exhibit (Appendix H), in the event that Campus 1 WRF is utilized and Campus 2 WRF is under utilized, the following scenario would be considered:
- Construct the infrastructure necessary to convey wastewater from the southern portion of the Belmont development and surrounding areas, as appropriate, to the Campus 2 WRF to be located south of Interstate-10 (I-10). This scenario would require boring beneath I-10 and constructing the required sewer lines through the bore.

The reclaimed water infrastructure would closely mirror the wastewater collection system in order to serve the development(s) generating the wastewater (since they will have the reclaimed water storage impoundments) as well as the actual landscape needing reuse water.
6.0 EXISTING AND PROPOSED WATER RECLAMATION FACILITIES

6.1 Existing Facilities

This area of Maricopa County is relatively undeveloped. There are three small plants located in the Tonopah area that serve a mobile home park, a school and a truck stop, respectively. The mobile home park and school are located outside the boundary of the Northeast Service Area.

The Palo Verde Mobile Home Park is served by a 200,000 gpd activated sludge plant and the Ruth Fisher School is served by a 15,000 gpd activated sludge facility with an ultimate capacity of 45,000 gpd. Both facilities use percolation as their disposal method. As shown in Exhibit 2, both facilities are located outside of the Northeast Service Area.

There is also a small facility located at the Truckstops of America located at southwest corner of I-10 and 339th Avenue approximately 3 miles to the east of the western boundary of the NE Service Area. Truckstops of America is an activated sludge facility with a treatment capacity of 80,000 gpd. This facility uses percolation as their disposal method. None of these facilities are capable of serving the wastewater and reclaimed water needs of this HUC NE service area. The flows from the truck stop can be incorporated into HUC’s system, if they request service from HUC.

There are no sanitary districts or wastewater treatment facility CC&Ns within the boundary of the HUC NE Service Area. The only existing private utility is the Water Utility of Greater Tonopah, a subsidiary of Global Water, which provides water, not sewer, service only.

In addition, the proposed Tartesso Wastewater Treatment Plant (WWTP) is located within the Town of Buckeye’s MPA approximately 2 miles to the southeast of the proposed service area and to the east of the Hassayampa River. Several other existing or proposed facilities are located within the Town of Buckeye Planning Area; however, these facilities are up to 20 miles from the eastern boundary of the

UN:PROJECT:20060010 - Global Water West Hassayampa Master Plan06 PermitArea 1 20@Final - 051807/HUC NE Service Area MAG 208 - 052307.doc

Global Water Resources
HUC NE Service Area MAG 208

Page 6-1
May 2007
proposed service area. All of the facilities located in Buckeye or its MPA are on the east side of a natural watershed division, the Hassayampa River, and are not capable of serving the wastewater and reclaimed water needs of this HUC NE service area.

The new WRFs will be constructed in accordance with Best Available Demonstrated Control Technology (BADCT) for Sewage Treatment Facilities as prescribed by A.A.C. Title 18, Chapter 9, Part B (R18-9-B201).

6.2 Influent Wastewater Characteristics
The influent wastewater characteristics as described in the Table 6-1 are conservative in nature. The City of Avondale and Town of Buckeye have experienced high strength wastewater entering their facilities, likely indicative of low flow water fixtures and the groundwater sources used for potable water. Global’s Pinal County treatment facilities have encountered similar strength wastewaters and have experienced exceptional treatment results with the SBR technology, which will also be used in this proposed service area.

Table 6-1 Influent Wastewater Characteristics

<table>
<thead>
<tr>
<th>Wastewater Constituents</th>
<th>Concentration (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical Oxygen Demand, 5-day (BOD₅)</td>
<td>400</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>1,000</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>400</td>
</tr>
<tr>
<td>Total Nitrogen (TN)</td>
<td>75</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>15</td>
</tr>
<tr>
<td>Dissolved Oxygen (DO)</td>
<td>0</td>
</tr>
</tbody>
</table>

6.3 Proposed Facilities
The proposed WRFs will consist of screening and grit removal preliminary treatment followed by Sequencing Batch Reactors (SBR), post equalization, tertiary filtration and UV disinfection. A residual chlorine concentration will be maintained in the reclaimed water distribution system to reduce any potential for algal growth or other operational problems associated with re-growth. Dechlorination systems will be provided for use whenever the reclaimed water is diverted to a WUS under an
AzPDES/NPDES permit. The WRFs will be designed to produce Class A+ reclaimed water suitable for open access reuse and will exceed the anticipated requirements of the AzPDES/NPDES permit. Reclaimed water is expected to have less than 10 mg/L total nitrogen, BOD₅ and TSS, and turbidity less than 2 NTU. In the case of discharging to various receiving water bodies, the effluent will be dechlorinated to ensure that the Surface Water Quality Standard (SWQS) of the receiving water body for Total Residual Chlorine is achieved. Aerobic digesters will be designed to produce Class B sludge suitable for land application. Sludge will be dewatered using a belt press or centrifuge and disposed of at a landfill or on permitted farmland. The plant will have noise, odor and aesthetic control and include a standby diesel generator.

Global has developed design standards for its infrastructure, as well as manages any developer-constructed infrastructure through the use of their design standards and regulations for sewage systems. These regulations are included in Appendix E for reference. The setbacks for the facility will be 350 feet as required by the AAC pertaining to aquifer protection (AAC R18-9-B201-I). Typical WRF layout and process flow diagram are shown in Exhibits 7 and 8, respectively.

7The WRFs will be automated and controlled with a Supervisory Control and Data Acquisition (SCADA) system. Spent UV lamps will be disposed by returning to the manufacturer for proper disposal. Oils and grease collected from equipment maintenance will be stored in secure containers until it is picked up by an approved grease and oil recycler. The diesel fuel tank will have a retention wall around the slab to prevent any spills flowing to the ground and contaminating the groundwater. Spent activated carbon used for odor control will be collected by the supplier and regenerated.

6.4 Benefits of a Standard Modular Design

7The SBR technology, packaged with Conventional Filtration Deep Bed Sand filtration and ultraviolet disinfection, has been in use at another Global WRF for over 2 years and has consistently produced Class A+ effluent. This plant design is easily configured in 1, 2 and 3 mgd modules, and is deployed through a Design-Build delivery methodology which minimizes the construction time and allows the design engineer to have direct coordination and oversight of the construction. Further, the footprint required for the SBR technology is approximately 20 to 30 percent that of conventionally designed
plants. Substantial capital and O&M savings are realized due to the efficiency of the aeration system for biological treatment and a reduction in the sludge production.

In addition to the ease of design and construction, this modular approach also provides both operational and maintenance flexibility well beyond traditional plant designs. For example, process upsets can be isolated in this modular system such that the entire biological treatment is not affected. Staff is trained to operate and maintain the SBR plant and because of HUC’s standardization approach, staff can be interchanged among all plants. HUC’s warehousing for spare parts can also be shared and standardized.

7HUC is developing and deploying a state of the art SCADA system for asset management, process optimization, predictive maintenance, trouble shooting, and reclaimed water management. SCADA implementation of this magnitude is much more cost effective and efficient in a standardized facility network as deployed by HUC. This state of the art technology will employ statistical process controls, condition-based monitoring, and dynamically developed alarm conditions. In addition, fitted equipment health monitoring systems such as accelerometers for vibration analyses, shock pulse metering for bearing analyses and PLC-drive performance testing will allow HUC to provide predictive maintenance rather than reactive maintenance to mission critical equipment.

7.18 Another benefit of the standard modular design is the relative ease of permitting and compliance. Because the plant designs are virtually identical for all four WRFs in the service area, the APP (ADEQ) and USF (ADWR) applications are also virtually identical with only site geology and hydrology as its unique elements. Because all the plants will be producing Class A+ reclaimed water with the same technology, the compliance monitoring and reporting requirements are expected to also be identical, barring changes in the source groundwater or CAP water that may affect background contributions to constituent quality. The WRFs will produce reclaimed water that meets AWQS and applicable SWQS to allow for aquifer recharge and discharge to receiving water bodies, respectively.

6.5 Treatment Plant Startup Procedure
Initially, in order to prepare for start up, the SBR for the first HUC WRF campus will be seeded with seed sludge from the Palo Verde Utilities Company Campus 1 WRF located in Maricopa, Arizona. HUC’s parent company, Global Water, Inc., owns this company and facility as well as HUC. This seed
sludge will provide a viable biomass for the treatment of the wastewater, and will ensure the appropriate population of microorganisms to perform treatment. In the future, seed sludge for other HUC WRFs can be obtained from HUC campuses already in operation.
7.0 EFFLUENT MANAGEMENT

Global Water is at the forefront of water reclamation activities in the state of Arizona. Corporately, this philosophy includes the highest and best use for all water sources, and a mandate to minimize the impact of development on non-renewable resources. This translates into employing the appropriate grade of water for the desired use. The Tonopah/Arlington Area Plan adopted by Maricopa County in 2000 as part of the Eye to the Future 2020 planning initiative and their development master plan guidelines recommend land use planning to preserve natural resources and provide open areas for public use. In many cases, these open spaces will require irrigation water to maintain turf and other landscaping. In addition, HUC imposes limitations on the characteristics of that open space, as follows:

- Maximum surface water area (integrated irrigation impoundments) = 3%
- Maximum turf area = 22%
- Minimum xeriscape = 75%

The effect of the Maricopa County and HUC requirements on land use is shown in Figure 7-1. By limiting the irrigation demands in its service area where possible, as is the case with the open space requirements, HUC can better manage this precious water resource.
Figure 7-1  Composition of Land Usage in a Representative 1 Square Mile

By deploying an extensive network of reclaimed water lines, HUC is able to deliver reclaimed water for the following uses:

- Irrigation of common areas in all subdivisions and schools.
- Recharging to manage seasonal demand fluctuations and to reduce the impact of groundwater pumping on the aquifer.
- Deploying reclaimed water to other distribution networks in exchange for other sources of water (e.g. CAP water).
- As a source of water for cooling and process water for industrial purposes (as appropriate), and as flush water for toilets and urinals inside commercial, municipal and residential buildings.
- As a source of irrigation water for individual home sites.
In the event that the above uses are insufficient to consume the reclaimed water produced, HUC will maintain the necessary infrastructure and permits to allow for discharge to various washes as discussed in the following sections.

Global Water requires that all developments maximize the use of reclaimed water throughout their development areas. This includes the use of reclaimed water as the primary source of irrigation water, and for use in any recreational impoundments. The diversity of reclaimed water management is shown in Figure 7-2. The expected dispositions are reuse and recharge with discharge as a last resort. Figure 7-3, "Yearly Consumption Curve for a Representative 1 Square Mile" illustrates this expectation.
Reclaimed water from all the WRFs will be used for beneficial reuse, which may include turf irrigation at various points throughout the service area, recharge under an USF Permit to the aquifer, and/or as a last resort, discharge under an AzPDES/NPDES permit to numerous points throughout service area. The possible AzPDES/NPDES discharge locations are illustrated in Exhibit 6. HUC will use its reclaimed water infrastructure to supply treated water to multiple recharge and/or discharge sites. With the help of this infrastructure, reclaimed water demand can be met and delivery can be maximized across the service area, or recharged to the aquifer, prior to any discharge to the washes.

Also, reclaimed water in excess of reuse demand can be recharged into permitted wells or basins anywhere in the service area to optimize the recharge facility infrastructure (which has the additional benefit of allowing for recovery of stored water in periods of high demand). The implementation of multiple recharge facilities and interconnectivity of the reclaimed water infrastructure will provide flexibility of operation especially during the winter months and during periods of extended rainfall. Figure 7-4 illustrates how this integrated network for distribution of reclaimed water works. HUC operates their reclaimed water systems to avoid standing water in washes used for discharges. HUC will
have flexibility in operating and managing the WRFs with these multiple recharge and discharge sites. Various recharge and discharge sites are shown in the Exhibit 6.

![Diagram of reclaimed water distribution]

**Figure 7-4  Distribution of Reclaimed Water**

Specific information regarding discharge for each plant is discussed below.

**7.1.1  Campus 1 WRF**

Campus 1 will discharge, only as a last resort, to the Hassayampa River when/if production exceeds the reuse and recharge demand. The Hassayampa River joins the Gila River about 12 miles downstream (south) of the discharge point. HUC will apply for an AzPDES/NPDES permit for the discharges as required by the state of Arizona. The possible discharge locations are illustrated in Exhibit 6.

**7.1.2  Campus 2 WRF**

The Campus 2 WRF will discharge, only as a last resort, to the Dickey Wash and/or the Hassayampa River when/if production exceeds the reuse and recharge demand. The Dickey Wash is a tributary to the Luke Wash. The Hassayampa River joins the Gila River about 8 miles downstream (south) of this discharge point. HUC will apply for an AzPDES/NPDES Permit for the discharge. The possible discharge locations are illustrated in Exhibit 6.
7.1.3 Campus 3 WRF

The Campus 3 WRF will discharge, only as a last resort, to the Dickey Wash and/or Phillips Wash when/if production exceeds the reuse and recharge demand. The Dickey and Phillips Washes are tributary to the Luke Wash. HUC will apply for an AzPDES/NPDES Permit for the discharge. The possible discharge locations are illustrated in Exhibit 6.

7.1.4 Campus 4 WRF

The Campus 4 WRF will discharge, only as a last resort, to the Phillips Wash when/if production exceeds the reuse and recharge demand. The Phillips Wash is a tributary to the Luke Wash. HUC will apply for an AzPDES/NPDES Permit for the discharge. The possible discharge locations are illustrated in Exhibit 6.

Table 7-1 shows the WRFs with corresponding estimated build-out capacity, and effluent receiving bodies under AzPDES/NPDES permits.

<table>
<thead>
<tr>
<th>Water Reclamation Facility</th>
<th>Receiving Bodies under AzPDES/NPDES Permit</th>
<th>Distance to Receiving Bodies from WRF (Feet)</th>
<th>Direction from WRF to Receiving Bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td><strong>Buildout Capacity (mgd)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus 1</td>
<td>9</td>
<td>Hassayampa River</td>
<td>3,500</td>
</tr>
<tr>
<td>Campus 2</td>
<td>10</td>
<td>Hassayampa River</td>
<td>13,500</td>
</tr>
<tr>
<td>Campus 3</td>
<td>12</td>
<td>Dickey Wash</td>
<td>6,750</td>
</tr>
<tr>
<td>Campus 4</td>
<td>14</td>
<td>Dickey Wash</td>
<td>7,100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phillips Wash</td>
<td>4,180</td>
</tr>
</tbody>
</table>

Table 7-1 WRF Buildout Capacity and AzPDES/NPDES Receiving Bodies
8.0 REQUIRED PERMITS

The Campuses will require the following permits, certifications, and approvals:

- Section 401 Water Quality Certification issued by ADEQ
- AzPDES/NPDES Permits, ADEQ
  - Point Source Discharge to Waterway
  - Stormwater Discharges
- Section 404 Permits (for construction of outfalls), Army Corps of Engineers
  - The 404 permit process will include Pygmy Owl surveys, cultural resource survey, and native plant survey.
- Aquifer Protection Permit, ADEQ
- Underground Storage Facility Permit (to obtain credit for reclaimed water storage in aquifer), ADWR
- Water Storage Permit, ADWR
- Recovery Well Permit, ADWR
- Reclaimed Water Permit, ADEQ
- Drywell Registration, ADEQ
- Air Quality Permit, Maricopa County Air Quality Department (MCAQD)
- Approval to Construct, Maricopa County Environmental Services Department (MCESD)
- Approval of Construction, MCESD
- Special Use Permit, Maricopa County Planning and Development Department

No significant industrial wastewater is anticipated for these facilities. However, all users will be required to meet the Global’s Pretreatment Requirements which are included in Appendix E for reference. HUC’s line extension agreements include a provision that obligate users to comply with these pretreatment requirements.

18Following is a summary of the permit requirements applicable to the water reclamation facilities.
8.1 Section 208 Plan Amendment

In accordance with Section 208 of the Clean Water Act, an Areawide Water Quality Management Plan was prepared for the MAG. The MAG is the designated Areawide Water Quality Management Planning Agency for Maricopa County. The Water Quality Management Plan has been continually updated through several Plan Amendments and updates. This document will serve as the 208 Water Quality Plan Amendment for HUC which proposes to increase its service area to western Maricopa County to include approximately 63.6 square miles.

8.2 Aquifer Protection Permit (APP)

The State of Arizona Aquifer Protection Permit (APP) Program was established by the Environmental Quality Act (EQA) and is primarily designed to regulate facilities that may discharge to an aquifer. An individual APP permit is required for all new wastewater treatment plant facilities and all such facilities must be constructed and operated to meet the greatest degree of discharge constituent reduction achievable. The new WRFs will apply for APPs depending on the anticipated flows to their treatment facility. All new WRFs will produce Title 18 Class A+ reclaimed water suitable for both recharge to the aquifer and discharge to surface waters.

8.3 Reclaimed Water Reuse Permit

Type 2 Reclaimed Water General Permits are required for direct use of reclaimed water. The permit applications will be prepared for each reuse site including the agricultural land that will be irrigated until the other reuse sites are operational. Reclaimed water from all the WRFs will be used for beneficial reuse that includes turf irrigation, construction water, and non-potable use throughout the HUC Northeast Service Area.

8.4 USF/WS Permits

If the reclaimed water from the WRF is used to artificially recharge the aquifer, an USF permit is required. An USF permit will be obtained for all proposed WRFs as required depending on the construction and phasing of the treatment facility. The Water Storage (WS) permit is affiliated with the underground storage facility and allows the permit holder to store a specific amount of eligible water at that facility. If required, the WS permit will be obtained when required for all underground storage.
facilities. It should be noted that other land owned by Global Water, such as water treatment plant and pump station sites, may be used as recharge sites if necessary and will be permitted accordingly.

8.5 AzPDES/NPDES Permit

If the reclaimed from the WRF is discharged to any water receiving bodies, an AzPDES/NPDES Permit for discharge will be required. The AzPDES/NPDES Permit will be obtained for all proposed WRFs. The possible discharge locations are illustrated in Exhibit 6. Table 8-1 indicates the effluent receiving bodies for the various facilities.

Table 8-1 AzPDES Receiving Bodies

<table>
<thead>
<tr>
<th>Water Reclamation Facility</th>
<th>Receiving Bodies under AzPDES/NPDES Permit</th>
<th>Distance to Receiving Bodies from WRF (Feet)</th>
<th>Direction from WRF to Receiving Bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>Hassayampa River</td>
<td>3,500</td>
<td>East</td>
</tr>
<tr>
<td>Campus 2</td>
<td>Hassayampa River</td>
<td>13,500</td>
<td>East</td>
</tr>
<tr>
<td>Campus 3</td>
<td>Dickey Wash</td>
<td>6,750</td>
<td>West</td>
</tr>
<tr>
<td>Campus 4</td>
<td>Phillips Wash</td>
<td>4,180</td>
<td>West</td>
</tr>
</tbody>
</table>

8.6 Sludge Management

Part 503 of the Clean Water Act and Title 18, Chapter 9 of the AAC specify the quality of sewage sludge that may be applied to land, distributed and marketed, placed in a sludge disposal facility, or incinerated in a sewage sludge incinerator. The sludge generated at the all the WRFs will be stabilized, dewatered and then disposed of at an operating sanitary landfill certified by ADEQ to handle and dispose of sludge from wastewater treatment plants. It should be noted that the Class B sludge that is produced at the WRFs will be suitable for land application and can also be used for daily cover at the landfill site. Also, Class B sludge is suitable for farmland application at ADEQ approved sites. HUC may choose to use one or both the options for sludge beneficial reuse.

The closest landfill accepting sludge for disposal is:
Butterfield Station Municipal Solid Waste Landfill
99th Avenue, one mile north of Highway 238
Mobile, Arizona

Operated by:
Waste Management, Inc
2425 South 40th Street
Phoenix, Arizona 85034
Phone: (602) 256-0630

Waste Management, Inc. has agreed to accept sludge from HUC’s wastewater treatment facilities at Butterfield Station Municipal Solid Waste landfill site. HUC is confident that Waste Management, Inc. will accept the sludge from their other facilities in future. The life expectancy of the landfill is forty (40) to fifty (50) years. Protection of the groundwater at the landfill location will be provided by the landfill facility.

8.7 AzPDES Storm Water Pollution Prevention
An AzPDES Storm Water Pollution Prevention Permit (SWPPP) will be required for all the sites including the treatment plant site work. All hazardous material and potential pollutants shall be stored onsite in appropriate storage areas which are constructed to contain any spills or runoff of hazardous materials. Retention basins, silt traps, and other sediments barriers are to be provided at the site to filter sediments from storm water runoff leaving the site. The contractor for the facilities is responsible to obey all AzPDES Permit regulations relevant to construction sites to prevent surface water contamination. The contractor shall keep the site clean and have covered dumpsters on site which are emptied regularly.

8.8 Local Floodplain and Drainage Regulations
All proposed WRFs are outside of the 100 year flood limits of the floodplain.

8.9 Construction Permits (404/401 permits)
As appropriate, permits covering the requirements of Section 404 of the Clean Water Act will be obtained from the US Army Corps of Engineers (USACE), likely required to construct the outfalls for N/AzPDES discharges into WUS, and for any other infrastructure installed in the WUS. The impacted
areas will be minimized, to the extent possible, to allow most 404 permitting requirements to be covered under the Nationwide Permit Program.

8.10 Air Quality Permit

An Air Quality Permit will be obtained from Maricopa County for all WRFs, as required.

8.11 Non-Point Source Permits

Runoff from the streets and golf courses are non-point issues, but will not be under the control of HUC. It will be the developer’s/contractor’s responsibility and, ultimately, the HOA and homeowners to manage these issues.

8.12 Approval to Construct/Approval of Construction

The Approval to Construct permits for the WRF and associated infrastructure will be obtained from Maricopa County prior to construction. Upon completion of construction, Global will coordinate with Maricopa County to obtain Approval of Construction for their facilities prior to operation.

8.13 Special Use Permit

Maricopa County requires that a Special Use Permit be in place for a facility that does not fall under the zoning requirements for the property where the facility will be located. These permits will be obtained from Maricopa County on an as needed basis.
9.0 CONSTRUCTION OF WATER RECLAMATION FACILITIES

The new WRFs will be built depending on the pace and location of the development of the region. Initially, a 1 mgd treatment facility will be constructed at Campuses 1 and 2. As flows increase, these WRFs will be expanded or the Campuses 3 and 4 WRFs will be constructed at the necessary size. Deployment of WRFs will always be well in advance of the flows. The expected wastewater flows throughout the HUC Northeast Service Area is projected to be 45 mgd. The construction phasing tables presented in this section for all WRFs are tentative and will change depending on the development of the service area. All infrastructure and discharge lines will be sized for ultimate flows. Some process units like odor control, solids dewatering, and generators may be sized for multiple phases. Construction will follow non-point source requirements to control stormwater runoff.

9.1 Campus 1 WRF

The ultimate plant wastewater treatment capacity projected for the Campus 1 WRF is approximately 9 mgd. It is anticipated that the design and construction of Phase 1, the 1 mgd plant, will begin in 2008. Table 9-1 presents the proposed phasing. HUC expects to use Sequencing Batch Reactor technology, packaged with conventional filtration and ultraviolet disinfection for the Campus 1 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 1 WRF and all subsequent phases for the WRF expansion.
Table 9-1  Hassayampa Utility Company – Campus 1 WRF – Construction Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity, (mgd)</th>
<th>Treatment Capital Cost per Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>2,860</td>
<td>1.0 Total</td>
<td>$10 Million</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>5,720</td>
<td>2.0 Total (1.0 New)</td>
<td>$10 Million</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>11,440</td>
<td>4.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>17,160</td>
<td>6.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>5</td>
<td>2016</td>
<td>22,880</td>
<td>8.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>24,600</td>
<td>9.0 Total (1.0 New)</td>
<td>$10 Million</td>
</tr>
</tbody>
</table>

9.2 Campus 2 WRF

The ultimate plant wastewater treatment capacity projected for the Campus 2 WRF is approximately 10 mgd. Treatment technology will be similar to the Campus 1 WRF and HUC expects to use the SBR standardized technology at the Campus 2 WRF also. Table 9-2 shows the phasing plan for Campus 2 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 2 WRF and all subsequent phases for the WRF expansion.

Table 9-2  Hassayampa Utility Company – Campus 2 WRF – Construction Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity (mgd)</th>
<th>Treatment Capital Cost per Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>2,860</td>
<td>1.0 Total</td>
<td>$10 Million</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>5,720</td>
<td>2.0 Total (1.0 New)</td>
<td>$10 Million</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>11,440</td>
<td>4.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>17,160</td>
<td>6.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>5</td>
<td>2016</td>
<td>22,880</td>
<td>8.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>28,600</td>
<td>10.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
</tbody>
</table>

9.3 Campus 3 WRF

The ultimate plant wastewater treatment capacity projected for the Campus 3 WRF is approximately 12 mgd. Treatment technology will be similar to Campus 1 WRF and HUC expects to use the SBR standardized technology at the Campus 3 WRF also. Table 9-3 shows the phasing plan for
Campus 3 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 3 WRF and all subsequent phases for the WRF expansion.

Table 9-3  Hassayampa Utility Company – Campus 3 WRF – Construction Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity (mgd)</th>
<th>Treatment Capital Cost per Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2012</td>
<td>2,860</td>
<td>1.0 Total</td>
<td>$20 Million</td>
</tr>
<tr>
<td>2</td>
<td>2014</td>
<td>8,580</td>
<td>3.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>14,300</td>
<td>5.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>4</td>
<td>2018</td>
<td>20,020</td>
<td>7.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>5</td>
<td>2020</td>
<td>28,600</td>
<td>10.0 Total (3.0 New)</td>
<td>$30 Million</td>
</tr>
<tr>
<td>6</td>
<td>2022</td>
<td>34,320</td>
<td>12.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
</tbody>
</table>

9.4 Campus 4 WRF

The ultimate plant wastewater treatment capacity projected for the Campus 4 WRF is approximately 14 mgd. Treatment technology will be similar to Campus 1 WRF and HUC expects to use the SBR standardized technology at the Campus 4 WRF also. Table 9-4 shows the phasing plan for Campus 4 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 4 WRF and all subsequent phases for the WRF expansion.

Table 9-4  Hassayampa Utility Company – Campus 4 WRF – Construction Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Equivalent Dwelling Units</th>
<th>Treatment Capacity (mgd)</th>
<th>Treatment Capital Cost per Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2015</td>
<td>2,860</td>
<td>1.0 Total</td>
<td>$10 Million</td>
</tr>
<tr>
<td>2</td>
<td>2017</td>
<td>8,580</td>
<td>3.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>3</td>
<td>2019</td>
<td>14,300</td>
<td>5.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>4</td>
<td>2021</td>
<td>20,020</td>
<td>7.0 Total (2.0 New)</td>
<td>$20 Million</td>
</tr>
<tr>
<td>5</td>
<td>2023</td>
<td>28,600</td>
<td>10.0 Total (3.0 New)</td>
<td>$30 Million</td>
</tr>
<tr>
<td>6</td>
<td>2025</td>
<td>40,040</td>
<td>14.0 Total (4.0 New)</td>
<td>$40 Million</td>
</tr>
</tbody>
</table>
10.0 ENVIRONMENTAL IMPACTS/BENEFITS

The water reclamation facilities for the developments will provide benefits to the area:

- Centralized wastewater treatment will be provided, reducing the potential for groundwater contamination from overuse of septic tanks with leach fields in the area.
- Regional planning allows for maximum flexibility in wastewater treatment system infrastructure deployment and use.
- Planning for regional treatment sites now precludes siting problems in the future.
- The reclaimed water from the water reclamation facilities will be used for beneficial re-use (including common-area irrigation, commercial and industrial applications (if available), residential irrigation and residential non-potable applications) or for aquifer recharge. Interim application may be for crop irrigation.
- A consolidated, integrated water reclamation mandate reduces the impact of development on non-renewable resources (groundwater).
- The development and expansion of the water reclamation facilities will allow the area to accommodate growth in an environmentally safe manner.
- The development of new communities will fulfill a growing demand for affordable homes in high quality master planned communities, while retail uses within the community will provide an increased tax and employment base for Maricopa County.
- Industrial availability of reclaimed water can entice additional economic benefit to the region.
- The mechanical plants will meet Aquifer Water Quality Standards. The plant will be enclosed and have odor control.
- This plan meets the goal of regionalization set forth by MAG, County, State and Clean Water Act.
- All WRFs will have the ability to discharge excess Class A+ reclaimed water flows to waters of the US under an AzPDES/NPDES permit. Each WRF will meet or exceed the surface water quality standards for such discharges.
11.0 FINANCIAL INFORMATION

HUC, Inc is wholly owned subsidiary of Global Water Resources, Incorporated. Global is a Phoenix-based aggregator of small and medium sized regulated utility companies. Global is locally owned and operated and is well capitalized. HUC is committed to providing wastewater service in the proposed service area.

HUC will be responsible for the operation and maintenance of the sewage management system in their service area. The HUC’s customers pay user fees based upon fair value as determined by the ACC. The infrastructure expansions of all the plants and the backbone of the sewage collection system will be financed through Global equity. The developer-installed in-parcel infrastructure is funded through Advances in Aid of Construction (AIAC). Note that the in-parcel infrastructure must meet Global standards prior to acceptance for service. The Class A+ reclaimed water is distributed and sold to many users in accordance with tariff rates as promulgated by the ACC.

HUC will fund plant and backbone construction with equity. Any portion of pipeline and interceptors constructed within a development by a developer will be constructed under the approval of the HUC and conveyed to the HUC under a line extension agreement, all in accordance with the statutes of the ACC. Currently, Global Water is deploying $3 million a month in infrastructure to stay ahead of developers demands for service in its existing service areas. Appendix F includes letters from JP Morgan and Wells Fargo, each pledging access to cash in the low nine figures, as an example of HUC’s ability to finance these projects.
12.0 IMPACTS AND IMPLEMENTATION

12.1 Implementation Plan

The construction of the initial phase for Campuses 1 and 2 will begin in 2008. Phase 1 of the Campus 1 and Campus 2 facilities will have a one (1) mgd treatment capacity. The proposed phasing for Campuses 1 and 2 is shown in Tables 12-1 and 12-2.

The Campus 3 and Campus 4 WRF construction will begin in 2012 and 2015, respectively. Campus 1, 2, 3, and 4 WRFs will continue to expand as shown in the following tables until the ultimate buildout capacity of the 45 mgd is reached. The construction phasing for Campuses is tentative and will change depending on the development of the service area. Deployment of the second phase of the WRFs will always be well in advance of the flows. All infrastructure and discharge lines will be sized for ultimate flows. Some process units like odor control, solids dewatering, and generators may be sized for multiple phases.

Table 12-1 HUC Campus 1 WRF – Construction Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Capacity Available, Residential Units</th>
<th>Treatment Capacity, (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>5,720</td>
<td>2.0 Total (1.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>11,440</td>
<td>4.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>17,160</td>
<td>6.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2016</td>
<td>22,880</td>
<td>8.0 Total (2.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>24,600</td>
<td>9.0 Total (1.0 New)</td>
</tr>
</tbody>
</table>

Table 9-2 shows the phasing plan for Campus 2 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 2 WRF and all subsequent phases for the WRF expansion.
Table 12-2  HUC Campus 2 WRF – Construction Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Capacity Available, Residential Units</th>
<th>Treatment Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>5,720</td>
<td>2.0 Total (1.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>11,440</td>
<td>4.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>17,160</td>
<td>6.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2016</td>
<td>22,880</td>
<td>8.0 Total (2.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>28,600</td>
<td>10.0 Total (2.0 New)</td>
</tr>
</tbody>
</table>

Table 9-3 shows the phasing plan for Campus 3 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 3 WRF and all subsequent phases for the WRF expansion.

Table 12-3  HUC Campus 3 WRF – Construction Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Capacity Available, Residential Units</th>
<th>Treatment Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2012</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2014</td>
<td>8,580</td>
<td>3.0 Total (2.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>14,300</td>
<td>5.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2018</td>
<td>20,020</td>
<td>7.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2020</td>
<td>28,600</td>
<td>10.0 Total (3.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2022</td>
<td>34,320</td>
<td>12.0 Total (2.0 New)</td>
</tr>
</tbody>
</table>

Table 9-4 shows the phasing plan for Campus 4 WRF. HUC will be responsible for the design and construction of Phase 1 of the Campus 4 WRF and all subsequent phases for the WRF expansion.

Table 12-4  HUC Campus 4 WRF – Construction Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year Capacity Available</th>
<th>Capacity Available, Residential Units</th>
<th>Treatment Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2015</td>
<td>2,860</td>
<td>1.0 Total</td>
</tr>
<tr>
<td>2</td>
<td>2017</td>
<td>8,580</td>
<td>3.0 Total (2.0 New)</td>
</tr>
<tr>
<td>3</td>
<td>2019</td>
<td>14,300</td>
<td>5.0 Total (2.0 New)</td>
</tr>
<tr>
<td>4</td>
<td>2021</td>
<td>20,020</td>
<td>7.0 Total (2.0 New)</td>
</tr>
<tr>
<td>5</td>
<td>2023</td>
<td>28,600</td>
<td>10.0 Total (3.0 New)</td>
</tr>
<tr>
<td>6</td>
<td>2025</td>
<td>40,040</td>
<td>14.0 Total (4.0 New)</td>
</tr>
</tbody>
</table>
12.2 Impacts of the Proposed Plan

The Northeast Service Area is in largely undeveloped area of western Maricopa County. The impact of the HUC Campus 1, 2, 3 and 4 WRFs are not likely to have any impact on adjacent land uses, municipalities, certified service areas, existing sanitary districts, communities or businesses. The facilities will be constructed and operated with current noise and odor control technologies. The reclaimed water from the WRFS will be used for reuse and recharge thereby providing the benefit of augmenting water resources. At times, the reclaimed water may be discharged to nearby washes. It is not anticipated that any of these uses will increase the vector population or odors.
13.0 PUBLIC PARTICIPATION

MAG is responsible for ensuring that the following actions are taken as part of the public participation requirements as outlined in 40 CFR 25. HUC will participate in these efforts as required. The requirements include:

- Submit a mailing list that will be used to notify the public of the hearings on the 208 Plan Amendment
- Provide a 30-day notification to the public of the location where documentation pertaining to the amendment is available for review
- Publish a public notice with information on the date, time, subject, and location of the public hearing on the amendment application at least 45 days prior to the hearing
- Submit an affidavit of publication of the public notice
- Submit a responsiveness summary for the public hearing
208 Amendment Checklist
## 208 AMENDMENT CHECKLIST

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

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE Addressed</th>
<th>Addressed on Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>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.</td>
<td>In an effort to provide regional planning and centralized wastewater services, HUC plans to provide (centralized wastewater) services throughout the boundary of the HUC Northeast Service Area, as shown in Exhibit 3. The HUC Northeast Service Area is located in unincorporated Maricopa County, outside of a DMA. Global/HUC has adequate authority to perform the functions enumerated at Section 208(c)(2)(A)-(I), 33 U.S.C. § 1288(c)(2)(A)-(I) in the Northeast Service Area. The CWA Section 208(c)(2)(A)-(I) checklist is provided in Appendix C.</td>
<td>Page 2-1, 2-3 Appendix C</td>
</tr>
</tbody>
</table>
| 2        | Describe existing WWT facilities. | There are two small plants located in the Tonopah area that serve a mobile home park and school, respectively. As shown in Exhibit 2, both facilities are located outside of the service area. The Palo Verde Mobile Home Park is served by a 200,000 GPD plant and the Ruth Fisher School is served by a 15,000 GPD activated sludge facility. Both facilities use percolation as their disposal method.  

The Truckstops of America located at southwest corner of I-10 and 339th Avenue is 3 miles to the east of the western boundary of the NE Service Area. None of these facilities are capable of serving the wastewater and reclaimed water needs of this HUC NE service area. The flows from the truck stop can be incorporated into HUC’s system, if they request service from HUC.  

The Belmont WWTF included in the current MAG 208 Plan will not be built and facilities required to service that development are incorporated in this amendment. | Page 6-1, Exhibit 2 |
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Show WWT certified and service areas for private utilities and sanitary district boundaries if appropriate.</td>
<td>Truckstops of America located at southwest corner of I-10 and 339th Avenue is 3 miles to the east of the western boundary of the Northeast 208 Service Area. HUC filed an application for a CC&amp;N with the ACC for wastewater on September 19, 2005 (Docket No. SW-20422a-05-0659). The application covered a service area of approximately 2,050 acres encompassing the Hassayampa Ranch development. The CC&amp;N extension was approved in September 2006. Additionally, HUC filed an wastewater extension application for 20,454 acres on September 7, 2006, docket number SW-20422-06-0566 to incorporate the Belmont and 339th Avenue developments. Global's subsidiary, Water Utility of Greater Tonopah (WUGT), currently has CC&amp;N to serve water to the Hassayampa Ranch development, and has filed a water extension application with the ACC in September 2006 to service Belmont and 339th Ave developments.</td>
<td>Pages 2-2, 6-1 Exhibits 4, 5, and 6</td>
</tr>
</tbody>
</table>
## 208 AMENDMENT CHECKLIST
Section 208 Clean Water Act
40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>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.</td>
<td>POPTAC population projections for the 20-year planning period are:</td>
<td>Pages 4-1, 4-2, 4-3, 5-1, 5-2, 9-1, 9-2, 9-3, Tables 4-1, 5-1, 9-1 through 9-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MPA/RAZ 2000</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>346</td>
<td>3,030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Buckeye</td>
<td>16,700</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total County</td>
<td>3,096,600</td>
</tr>
</tbody>
</table>

Using 350 gpd/dwelling unit and the area to be serviced, the following flows are projected.

<table>
<thead>
<tr>
<th>Area Served (sq. miles)</th>
<th>Dwelling Units</th>
<th>Expected Wastewater Flows (mgd)</th>
<th>Water Reclamation Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campus 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL</td>
<td>45</td>
</tr>
</tbody>
</table>

5 Provide wastewater flow estimates over the 20-year planning period. See Item # 4 | Pages 5-1, 5-2, 9-1 Table 5-1
## 208 AMENDMENT CHECKLIST

### Section 208 Clean Water Act

### 40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Illustrate the WWT planning and service areas.</td>
<td>Through this amendment, HUC has addressed four new WRFs to serve 63.6 sections in western Maricopa County. The boundary of the HUC Northeast Service Area extends south from the Central Arizona Project Canal in the north, east from 363rd Avenue to the Buckeye Municipal Planning Area on its eastern boundary, and south to Buckeye Road.</td>
<td>Exhibits 1, 2, 3, 4, 5, 6, Pages 2-1, 2-3, 3-1, 4-1, 4-2, 4-3, 4-4, 5-3</td>
</tr>
<tr>
<td>7</td>
<td>Describe the type and capacity of the recommended WWT Plant.</td>
<td>The WRFs will use the similar technology that has been successfully implemented at other water reclamation facilities owned by Global Water. The plant will consist of screening and grit removal preliminary treatment followed by sequencing batch reactors, post equalization, tertiary filters and UV disinfection. The plant will be designed to produce Title 18 Class A+ reclaimed water and meets SWQS for discharges to WUS. Expected buildout capacity of all the WRFs are:</td>
<td>Pages 3-1, 6-2, 6-3, 6-4, 9-1, 9-2, 9-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Expected Buildout Capacity (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>9</td>
</tr>
<tr>
<td>Campus 2</td>
<td>10</td>
</tr>
<tr>
<td>Campus 3</td>
<td>12</td>
</tr>
<tr>
<td>Campus 4</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Identify water quality problems, consider alternative control measures, and recommend solution for implementation.</td>
<td>The only potential water quality issues may include arsenic or nitrates in the groundwater due to historic agricultural uses or natural geophysical conditions, but there are no known conditions to surface water in the area (the washes are ephemeral, dry). There are no known mining operations that could cause water quality problems. The Arizona Department of Mines and Mineral Resources does not list any active mineral or sand and gravel mines within the service area.</td>
<td>Page 2-4</td>
</tr>
</tbody>
</table>
### 208 AMENDMENT CHECKLIST
Section 208 Clean Water Act
40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>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?</td>
<td>There are no private WWT utilities with certificated areas within the proposed service area.</td>
<td>Page 2-2, 6-1, Exhibits 2, 3, 4, 5, 6</td>
</tr>
<tr>
<td>10</td>
<td>Describe method of reclaimed water disposal and reuse sites (if appropriate).</td>
<td>The treated reclaimed water from the water reclamation facilities will be used to irrigate golf courses, recreational lakes, parks and landscaping and for other direct reuse applications. If the production exceeds the irrigation/reuse demand, water will be used to recharge the aquifers under an USF permit. Thus, discharges to various receiving water bodies including the Dickey Wash, Phillips Wash, and the Hassayampa River will occur only infrequently, if at all, and only in emergency conditions. Discharges will occur only if the numerous recharge facilities are under maintenance or sustained cold temperatures have drastically reduce reclaimed water consumption. In other words, discharge to these washes will be used as a last option for managing reclaimed water flows. When discharges are required, GWR plans to limit the discharge to the greatest extent possible. An AZPDES permit for discharge to water receiving bodies will be required. During the early phases of the project reclaimed water may be used to irrigate agricultural land near the plant or on unused portions of the plant site.</td>
<td>Pages 2-3, 3-2, 4-1, 4-2, 4-3, 4-4, 4-5, 7-2, 7-3, 7-4, 7-5, 7-6, 8-2, 8-3, Figure 7-2, 7-4</td>
</tr>
<tr>
<td>11</td>
<td>If Sanitary Districts are within a proposed planning or service area, describe who serves the Sanitary Districts and when.</td>
<td>Currently, there are no sanitary districts within the proposed service area.</td>
<td>Page 6-1</td>
</tr>
<tr>
<td>12</td>
<td>Describe ownership of land proposed for plant sites and reuse areas.</td>
<td>The new WRFs will be located on property that is currently undeveloped and owned privately. HUC will own in fee each entire WRF site including its 350 foot setback area. Land that is largely agricultural or desert held privately is being developed by numerous developers into subdivisions and master planned communities, portions of which will be planned and developed as commercial or industrial. Reuse sites will be owned by HOAs, school districts, etc. As appropriate, commercial and industrial (if applicable) users may become reuse customers as well. Recharge sites will be owned by HUC.</td>
<td>Pages 7-4, 11-1</td>
</tr>
</tbody>
</table>
# 208 AMENDMENT CHECKLIST

Section 208 Clean Water Act  
40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
</table>
| 13       | Address time frames in the development of the treatment works. | The new WRFs will be built depending on the development of the region. If the development is slow and flows generated are low, then pump stations will be constructed and flows will be diverted to an adjacent WRF with available capacity for treatment. Once the treatment demand increases, the construction of the new WRFs will commence. If development and growth is fast, the WRFs will be constructed to handle the expected flows. Times frames for start and buildout capacities to be online:  
  - Campus 1: Phase 1 2008; Buildout 2018  
  - Campus 2: Phase 1 2008; Buildout 2018  
  - Campus 3: Phase 1 2012; Buildout 2022  
  - Campus 4: Phase 1 2015; Buildout 2025 | Pages 4-1, 4-3, 9-1, 9-2, 9-3, 12-1, 12-2  
  - Table 9-1, 9-2, 9-3, 9-4 |
<p>| 14       | Address financial constraints in the development of the treatment works. | HUC will fund plant and backbone construction with equity. Any portion of pipeline and interceptors constructed within a development by a developer will be constructed under the approval of the HUC and conveyed to the HUC under a line extension agreement, all in accordance with the statutes of the ACC. Currently, Global Water is deploying $3 million a month in infrastructure to stay ahead of developers demands for service in its existing service areas. Appendix F includes letters from JP Morgan and Wells Fargo, each pledging access to cash in the low nine figures, as an example of HUC's ability to finance the project. | Page 11-1, Appendix F |</p>
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Describe how discharges will comply with EPA municipal and industrial stormwater discharge regulations (Section 405, CWA).</td>
<td>An AZPDES Storm Water Pollution Prevention Permit (SWPPP) will be required for each site including the treatment plant construction. All hazardous material and potential pollutants shall be stored onsite in appropriate storage areas which are constructed to contain any spills or runoff of hazardous materials. Retention basins, silt traps, and other sediments barriers are to be provided at the site to filter sediments from storm water runoff leaving the site. The contractor for the facilities is responsible to obey all AZPDES Permit regulations relevant to construction sites to prevent surface water and groundwater contamination. The contractor shall keep the site clean and have covered dumpsters on site which are emptied regularly.</td>
<td>Pages 8-4, 9-1</td>
</tr>
<tr>
<td>16</td>
<td>Describe how open areas &amp; recreational opportunities will result from improved water quality and how those will be used.</td>
<td>All WRFs will produce Title 18 Class A+ reclaimed water suitable for common-area irrigation, golf course irrigation, industrial/commercial applications, residential irrigation and residential non-potable use. A reclaimed water distribution system is planned to return reclaimed water to the development projects for use in recreational lakes and landscape irrigation. The availability of the reclaimed water will allow developers to provide open areas and water bodies for public use that may not have been feasible without this source.</td>
<td>Pages 2-3, 3-2, 4-1, 4-3, 4-4, 4-5, 6-3, 7-2, 7-3, 7-4, 8-2, 11-1 Figure 7-2</td>
</tr>
<tr>
<td>17</td>
<td>Describe potential use of lands associated with treatment works and increased access to water-based recreation, if applicable.</td>
<td>No changes in land use are anticipated.</td>
<td>-</td>
</tr>
</tbody>
</table>
## 208 AMENDMENT CHECKLIST

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

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REGULATIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Describe types of permits needed, including NPDES, APP and reuse.</td>
<td>Required permits will include APP, AZPDES, USF, Reuse, Storm water, and Air Quality</td>
<td>Pages 2-3, 3-1, 3-2, 4-1, 4-3, 4-4, 4-5, 6-3, 6-4, 7-4, 7-5, 7-6, 8-1, 8-2, 8-3, 8-4, 8-5, 9-1, Tables 3-1, 8-1</td>
</tr>
<tr>
<td>19</td>
<td>Describe restrictions on NPDES permits, if needed, for discharge and sludge disposal.</td>
<td>An AZPDES permit for discharge into water receiving bodies will be required. Biosolids quality and handling will be addressed in the permit. The Class B sludge produced at the WRFs is also suitable for farmland application at ADEQ approved sites. HUC may use this reuse option instead of or in addition to landfilling. A permit will be obtained if applied for agricultural reuse.</td>
<td>Pages 6-3, 8-2, 8-3, 8-4</td>
</tr>
<tr>
<td>20</td>
<td>Provide documentation of communication with ADEQ Permitting Section 30 to 60 days prior to public hearing regarding the need for specific permits.</td>
<td>Letter to Asif Majeed, ADEQ was submitted on October 9, 2006. Letter is attached.</td>
<td>Exhibit 9</td>
</tr>
<tr>
<td>21</td>
<td>Describe pretreatment requirements and method of adherence to requirements (Section 208 (b)(2)(D), CWA).</td>
<td>Global Water Resources has ordinances for pretreatment and contractually obligates users to adhere to its program which is equivalent to CFR 403 program. See Appendix E, page 21 of the HUC Wastewater System Standards and the Code of Practice for prohibited and restricted wastes; and/or <a href="http://www.gwresources.com">www.gwresources.com</a> to view or download most current requirements and codes of practice.</td>
<td>Appendix E</td>
</tr>
<tr>
<td>ITEM NO.</td>
<td>REQUIREMENT</td>
<td>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</td>
<td>ADDRESSED ON PAGE:</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>22</td>
<td>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).</td>
<td>The contractor for the facilities is responsible to obey all AZPDES Permit regulations relevant to construction sites to prevent surface water and groundwater contamination. All hazardous materials and potential pollutants shall be stored onsite in appropriate storage areas which are constructed to contain any spills or runoff of hazardous materials. Retention basins, silt traps, and other sediment barriers are to be provided at the site to filter sediment from storm water runoff leaving the site. The contractor shall keep the site clean and have covered dumpsters on site which are emptied regularly.</td>
<td>Pages 8-4</td>
</tr>
<tr>
<td>23</td>
<td>Describe alternatives and recommendation in the disposition of sludge generated. (Section 405 CWA).</td>
<td>Stabilized and dewatered sludge will be disposed of at an operating sanitary landfill certified by ADEQ to handle and dispose of sludge from wastewater treatment plants. Protection of the groundwater at the landfill location will be provided by the landfill facility. The closest landfill accepting sludge for disposal is: Butterfield Station Municipal Solid Waste Landfill, 99th Avenue, one mile north of Highway 238, Mobile, Arizona. All WRFs will produce Class B biosolids suitable for agricultural reuse by permit. HUC may find suitable reuse for its biosolids, and will obtain the necessary permits at that time.</td>
<td>Pages 6-3, 8-3</td>
</tr>
<tr>
<td>24</td>
<td>Define any nonpoint issues related to the proposed facility and outline procedures to control them.</td>
<td>There are no non-point issues related to the wastewater treatment plants. There are no permits to be obtained for a non-point source issue. If an issue does occur, the contractor will be required to address the problem and manage the issue. Runoff from streets and golf courses are nonpoint issues, but will not be under the control of HUC. It will be the developer's/contractor's responsibility and ultimately the HOA and homeowners that manage these issues. There are no industrial users currently planned for the Northeast 208 Service Area.</td>
<td>Page 8-4, 8-5</td>
</tr>
<tr>
<td>25</td>
<td>Describe process to handle all mining runoff, orphan sites and underground pollutants, if applicable.</td>
<td>There are no known mining operations that could cause water quality problems. The Arizona Department of Mines and Mineral Resources does not list any active mineral or sand and gravel mines within the service area.</td>
<td>-</td>
</tr>
</tbody>
</table>
### 208 AMENDMENT CHECKLIST
Section 208 Clean Water Act
40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>If mining related, define where collection of pollutants has occurred, and what procedures are going to be initiated to contain contaminated areas.</td>
<td>There are no known mining operations that could cause water quality problems. The Arizona Department of Mines and Mineral Resources does not list any active mineral or sand and gravel mines within the service area.</td>
<td>-</td>
</tr>
<tr>
<td>27</td>
<td>If mining related, define what specialized procedures will be initiated for orphan sites, if applicable.</td>
<td>There are no known mining operations that could cause water quality problems. The Arizona Department of Mines and Mineral Resources does not list any active mineral or sand and gravel mines within the service area.</td>
<td>-</td>
</tr>
</tbody>
</table>

### CONSTRUCTION

| 28       | Define construction priorities and time schedules for initiation and completion. | The new WRFs will be built to accommodate the development of the HUC Northeast 208 Service Area. If the development is slow and flows generated are low, then pump stations will be constructed and flows will be diverted to an adjacent WRF with available capacity for treatment. Once the treatment demand increases, the construction of the new WRFs will commence. If development and growth is fast, the WRFs will be constructed to handle the expected flows. Times frames for startup and buildout capacities to be online: Campus 1: Phase 1 2008; Buildout 2018 Campus 2: Phase 1 2008; Buildout 2018 Campus 3: Phase 1 2012; Buildout 2022 Campus 4: Phase 1 2015; Buildout 2025 Refer to Section 9 and Tables 9-1 to 9-4 for the construction and development phases of WRFs. | Pages 4-1, 5-3, 9-1, 9-2, 9-3, 12-1, 12-2, Tables 9-1, 9-2, 9-3, 9-4, 12-1, 12-2, 12-3, 12-4 |
| 29       | Identify agencies who will construct, operate and maintain the facilities and otherwise carry out the plan. | HUC will be responsible for the operation and maintenance of the sewage management system in their service area. HUC will fund the plant construction and major backbone infrastructure. Any portion of pipelines and interceptors constructed within a development by a developer will be conveyed to HUC under a main extension agreement. Global/HUC will be responsible for the design and construction for all phases of the WRF. | Page 11-1 |
# 208 AMENDMENT CHECKLIST

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

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Identify construction activity-related sources of pollution and set forth procedures and methods to control, to the extent feasible, such sources.</td>
<td>The contractor for the facilities is responsible to obey all AZPDES Permit regulations relevant to construction sites to prevent surface water and groundwater contamination. All hazardous materials and potential pollutants shall be stored onsite in appropriate storage areas which are constructed to contain any spills or runoff of hazardous materials. Retention basins, silt traps, and other sediment barriers are to be provided at the site to filter sediment from storm water runoff leaving the site. The contractor shall keep the site clean and have covered dumpsters on site which are emptied regularly. An AZPDES Storm Water Pollution Prevention Permit will be obtained for each project site including the treatment plant site work.</td>
<td>Pages 8-4, 9-1</td>
</tr>
</tbody>
</table>

**FINANCING AND OTHER MEASURES NECESSARY TO CARRY OUT THE PLAN**

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>If plan proposes to take over certified private utility, describe how, when and financing will be managed.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Describe any significant measure necessary to carry out the plan, e.g., institutional, financial, economic, etc.</td>
<td>HUC is responsible for the operation and maintenance of the sewage management system in their service area. The HUC customers pay user fees based upon fair value as determined by the ACC. The infrastructure expansions of both plant and backbone will be financed by way of equity from the parent company, Global Water Resources. Class A+ reclaimed water is distributed and sold to its many users who in turn compensate the Company for its treatment and delivery costs in accordance with tariffed rates as promulgated by the ACC. See attached letters in Appendix F from JP Morgan and Wells Fargo, each pledging access to cash in the low nine figures as an example of HUC’s ability to finance these projects.</td>
<td>Page 11-1 Appendix F</td>
</tr>
<tr>
<td>33</td>
<td>Describe proposed method(s) of community financing.</td>
<td>The HUC customers pay user fees based upon fair value as determined by the ACC. Class A+ reclaimed water is distributed and sold to its many users who in turn compensate the Company for its treatment and delivery costs in accordance with tariffed rates as promulgated by the ACC. No methods of community financing will be used.</td>
<td>Page 11-1</td>
</tr>
</tbody>
</table>
## 208 AMENDMENT CHECKLIST
Section 208 Clean Water Act
40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Provide financial information to assure DMA has financial capability to operate and maintain wastewater system over its useful life.</td>
<td>The HUC Northeast 208 Service Area is located in unincorporated Maricopa County, outside of a DMA. Letters of credit are included to demonstrate HUC’s ability to construct the WRFs, and Global’s balance sheet is also included in Appendix F.</td>
<td>Appendix F</td>
</tr>
<tr>
<td>35</td>
<td>Provide a time line outlining period of time necessary for carrying out plan implementation.</td>
<td>Buildout of the WRFs to provide the 45 mgd of capacity is expected to occur by 2025. The new WRFs will be built to accommodate the development of the HUC Northeast Service Area. If the development is slow and flows generated are low, then pump stations will be constructed and flows will be diverted to an adjacent WRF with available capacity for treatment. Once the treatment demand increases, the construction of the new WRFs will commence. If development and growth is fast, the WRFs will be constructed to handle the expected flows. Refer to Section 9 and Tables 9-1 to 9-4 for the construction and development phases of WRFs.</td>
<td>Pages 9-1, 9-2, 9-3, 12-1, 12-2, Tables 9-1, 9-2, 9-3, 9-4, 12-1, 12-2, 12-3, 12-4</td>
</tr>
<tr>
<td>36</td>
<td>Provide financial information indicating the method and measures necessary to achieve project financing. (Section 201 CWA or Section 604 may apply.)</td>
<td>The infrastructure expansions of WRFs and backbone will be financed by way of equity from the parent company, Global Water Resources. Global Water Resources has access to cash in the nine figures through its relationship with Levine Investments. The HUC customers pay user fees based upon fair value as determined by the ACC. Class A+ reclaimed water is distributed and sold to its many users who in turn compensate the Company for its treatment and delivery costs in accordance with tariffed rates as promulgated by the ACC. HUC will fund the plant construction with equity. Any portion of pipelines and interceptors constructed within a development by a developer will be constructed under the approval of the Company and conveyed to the Company under a line extension agreement, all in accordance with the statutes of the ACC. Developers are reimbursed through an Advance in Aid of Construction (AIAO) agreement, approved by the ACC.</td>
<td>Pages 11-1</td>
</tr>
</tbody>
</table>

### IMPLEMENTABILITY
### 208 AMENDMENT CHECKLIST

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

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>Describe impacts and implementability of Plan:</td>
<td>The area is mostly agricultural and there are no other operational wastewater treatment plants that are available to receive, treat and dispose of the sewage from the service area. The planned Belmont WWTF included in the current MAG 208 Plan will not be built and the facilities required to serve the Belmont development will be incorporated into this amendment.</td>
<td>Pages 9-1, 9-2, 9-3, 12-1, 12-2</td>
</tr>
<tr>
<td>38</td>
<td>Describe how and when existing package plants will be connected to a regional system.</td>
<td>The campuses will be integrated within the service area as described in this amendment; however there are no existing facilities within the service area at this time.</td>
<td>Page 6-1</td>
</tr>
<tr>
<td>39</td>
<td>Describe the impact on communities and businesses affected by the plan.</td>
<td>The development and expansion of the wastewater treatment plants will allow the area to accommodate growth in an environmentally safe manner. The development of new communities will fulfill a growing demand for affordable homes in high quality master planned communities, while retail uses within the community will provide an increased tax and employment base for Maricopa County. HUC may deliver reclaimed water to farmers for irrigation of agricultural crops. Planning for discharge sites today precludes siting problems in the future, and creates the opportunity for developers to amenitize these areas if they so desire. The discharge sites have been identified in WUS, where possible. In all cases, WUS are floodplains or floodways and are not developable areas, unless they are engineered into new channel configurations to remove portions of land from the floodplain. The discharge sites will all be located in floodplains or floodways in coordination with the required USACE and ADEQ permitting processes.</td>
<td>Pages 10-1, 12-2</td>
</tr>
<tr>
<td>40</td>
<td>If a municipal wastewater (WWT) system is proposed, describe how WWT service will be provided until the municipal system is completed: i.e., will package plants and septic systems be allowed and under what circumstances. (Interim services).</td>
<td>No interim facilities, package or septic, are proposed in this application.</td>
<td>-</td>
</tr>
</tbody>
</table>
# 208 Amendment Checklist

## Section 208 Clean Water Act

### 40 CFR Part 130.6

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>REQUIREMENT</th>
<th>PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED</th>
<th>ADDRESSED ON PAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PUBLIC PARTICIPATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>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)</td>
<td>Public participation requirements will be satisfied through MAG.</td>
<td>Page 13-1</td>
</tr>
<tr>
<td>42</td>
<td>List location where documents are available for review at least 30 days before public hearing.</td>
<td>Public participation requirements will be satisfied through MAG.</td>
<td>Page 13-1</td>
</tr>
<tr>
<td>43</td>
<td>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.</td>
<td>Public participation requirements will be satisfied through MAG.</td>
<td>Page 13-1</td>
</tr>
<tr>
<td>44</td>
<td>Submit affidavit of publication for official newspaper publication.</td>
<td>Public participation requirements will be satisfied through MAG.</td>
<td>Page 13-1</td>
</tr>
<tr>
<td>45</td>
<td>Submit responsiveness summary for public hearing.</td>
<td>Public participation requirements will be satisfied through MAG.</td>
<td>Page 13-1</td>
</tr>
</tbody>
</table>
Exhibit 1

Vicinity Map
Exhibit 2

Aerial Photograph with Municipal Planning Area
Exhibit 3

Developers in HUC NE Service Area with Existing or Pending Agreements with Global
Exhibit 4

Water Reclamation Facility Location Map
Exhibit 5

Sewer Collection System
Exhibit 6

Water Reclamation Facilities, Recharge and Discharge Sites
Exhibit 7

Typical WRF Layout
SEWAGE LIFT STATION (IF REQUIRED)

PHASE I
(XXX MGD SBR)

EFF. LIFT STA.

PHASE II
(XXX MGD SBR)

EMERGENCY POWER GENERATOR

PHASE III
(XXX MGD SBR)

PHASE IV
(XXX MGD SBR)

CMU WALL

1015'

24" S

18" S

350' SETBACK

350' SETBACK

350' SETBACK

350' SETBACK

1295'

1295'

1015'

- RECHARGE WELL (IF REQUIRED)

GLOBAL WATER RESOURCES, LLC
208 AMENDMENT

GLOBAL WATER
RELIABLE • RENEWABLE • REUSABLE

TYPICAL WRF LAYOUT
HUC NE PROPOSED 208

EXHIBIT 7
Exhibit 8

Process Flow Diagram Typical WRF
NARRATIVE DESCRIPTION

THE PLANT WILL BE ENCLOSED AND INCLUDE ODOR CONTROL. INFLUENT SEWAGE WILL BE PUMPED INTO THE HEADWORKS WHERE SCREENING, GRIT REMOVAL, AND FLOW MEASUREMENT WILL OCCUR. SCREENING AND GRIT WILL BE DEWATERED AND DISPOSED OF AT LANDFILL. SECONDARY TREATMENT WILL INCLUDE BODs AND TSS REMOVAL AND NITRIFICATION/DENITRIFICATION FOR NITROGEN REMOVAL. THE SECONDARY TREATMENT PROCESS IS A SEQUENCING BATCH REACTOR THAT PROVIDES AERATED BIOLOGICAL TREATMENT WITH NITRIFICATION, ANOXIC DENITRIFICATION AND CLARIFICATION IN ONE TANK. SLUDGE WILL BE WASTED TO AN AEROBIC DIGESTOR. SECONDARY EFFLUENT WILL BE DECANTED INTO A SURGE TANK AND THEN PUMPED TO A TERTIARY FILTER (AUTOMATIC BACKWASH SAND FILTER) FOLLOWED BY UV DISINFECTION. WASTE SLUDGE WILL BE STABILIZED IN AN AEROBIC DIGESTOR AND DEWATERED USING MECHANICAL DEWATERING (BELT PRESS) TO PRODUCE A CLASS B SLUDGE. ULTIMATE SLUDGE DISPOSAL WILL BE TO A LANDFILL OR PERMITTED LAND APPLICATION.
Exhibit 9

Letter to Arizona Department of Environmental Quality
October 9, 2006

Asif Majeed, Manager
Wastewater Recharge and Reuse Unit
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, AZ 85007

Subject: Hassayampa Utility Company – Northeast Service Area
MAG 208 Amendment
DSWA Project No. 060010

Dear Mr. Majeed:

Hassayampa Utility Company, Inc (HUC) is submitting an application for an Amendment to the Maricopa Association of Governments (MAG) Clean Water Act Section 208 Areawide Water Quality Management Plan. The focus of this amendment is on consolidation of this utility’s proposed planning area (referred to as the Northeast Service Area). This amendment provides planning information for four new Water Reclamation Facilities (WRF). Exhibits 1 and 6 (from the MAG 208 Amendment application) showing the planning area boundary and proposed WRF locations are attached for your reference.

The construction phasing of the new WRFs depends on the development of the region. If the development is slow and flows generated are low and enough excess capacity is available at existing facilities, then pump stations will be constructed and flows will be diverted to an adjacent WRF with available capacity for treatment. Once the treatment demand increases, the construction of the new WRFs will commence. If development and growth is fast and capacity at existing WRFs is not available, the WRFs will be constructed to handle the expected flows. The expected wastewater flow and the combined treatment capacity of all the WRFs throughout the service area is projected to be 46 mgd.

The WRFs will use the same technology that has been successfully implemented at the Palo Verde Utilities Company’s WRFs (Palo Verde Utilities is also a subsidiary of Global Water). The plant will consist of screening and grit removal followed by sequencing batch reactors, post equalization, tertiary filters and UV disinfection. The plant will be designed to produce Class A+ effluent that allows open access reuse and will exceed the anticipated requirements of an AZPDES or NPDES Permit. Effluent is expected to have less than 10 mg/L total nitrogen, BOD and TSS, and turbidity less than 2 NTU. Aerobic digesters will be designed to produce Class B sludge. Sludge will be dewatered using a belt press or a centrifuge and disposed of at a landfill or on permitted farmland. The plant will have noise, odor and aesthetic control and include a standby diesel generator. The setbacks for the facility will be 350 feet in accordance with the Arizona Administrative Code (AAC) R18-9-B201-I. A typical site plan for the new WRFs (Exhibit 7 from the MAG 208 Amendment application) is also attached. Design of the management system will be based upon sound engineering principles.

The WRFs will be automated and controlled with a SCADA (supervisory control and data acquisition) system. Spent ultraviolet (UV) lamps will be disposed by returning to the manufacturer for proper disposal. Oils and grease collected from equipment maintenance will be stored in secure containers until it is picked up by an
approved grease and oil recycler. The diesel fuel tank will have a retention wall around the slab to prevent any spills flowing to the ground and contaminating the groundwater. Spent charcoal used for odor control will be collected by the supplier and re-generated. Exhibit 8, from the MAG 208 Amendment application and attached for your use, illustrates a typical process flow diagram.

Effluent from the WRFs will be used for beneficial reuse, recharge to the aquifer under USF permit, and/or discharge under an AZPDES or NPDES permit. Beneficial reuse includes turf irrigation, industrial reuse and non-potable use throughout the service area. In case reclaimed water supply exceeds beneficial reuse demand, then it will be used to recharge the aquifer under an USF permit. If the supply exceeds both irrigation and recharge capacity, then it will be discharged to the receiving bodies (wash, river etc.) under an AZPDES/NPDES permit. The WRFs will have the ability to discharge to multiple points in the local washes under AZPDES or NPDES permits (if needed) when production exceeds irrigation demand and recharge ability. During the early stages of development, HUC may contract to irrigate agricultural land, typically alfalfa or cotton, as a source for reclaimed water use.

Hassayampa Utility Company understands that all the WRFs effluent will require the following permits:

1. Individual APP for the new plants and recharge facilities
2. Reuse Permits for each effluent customer
3. AZPDES or NPDES for any surface water discharge to waters of the U.S.
4. Air Quality Permit from Maricopa County
5. Underground Storage Facility and Water Storage Permits

The 208 Amendment will be submitted to MAG and ADEQ in October 2006 for review.

If you should have any questions and/or concerns, please do not hesitate to call me.

Very truly yours,
Damon S William Associates, LLC

Christine Close, P.E.

cc: Linda Taunt, ADEQ
    Graham Symmonds, HUC
Appendix A

Development Agreements
Hassayampa Ranch
INFRASTRUCTURE COORDINATION, FINANCE AND OPTION AGREEMENT

THIS INFRASTRUCTURE COORDINATION, FINANCE AND OPTION AGREEMENT (this “Agreement”) is entered into as of June 24, 2005 between Global Water Resources, LLC, an Delaware limited liability company (“GWR” and “Coordinator”) and Hassayampa Ranch Ventures, LLC, a Delaware limited liability company (“Landowner”).

RECITALS

A. Coordinator is engaged in the business of, among other things, providing services or benefits to landowners, such as: (i) developing master utility plans for services including natural gas, electricity, cable television, Internet, intranet, and telecommunications; (ii) providing construction services for water and wastewater treatment facilities, and (iii) providing financing for the provision of infrastructure in advance of and with no guarantee of customer connections.

B. Coordinator owns several regulated utilities in the State of Arizona and intends to form a new wastewater utility through the Arizona Corporation Commission for the purpose of serving the Landowner’s property known as Hassayampa Ranch. This new entity will be called the Hassayampa Utilities Company (“HUC”) and will be a wholly owned subsidiary of Global Water Resources, Inc. Coordinator provides equity for its subsidiaries capital construction and improvements.

C. HUC will be an Arizona public service corporation. HUC will seek a certificate of convenience and necessity (“CC&N”) from the Arizona Corporation Commission (“ACC”) to
provide wastewater services and reclaimed water services ("Utility Services") in a designated geographic area within the State of Arizona. Through Coordinator, HUC shall provide wastewater services and reclaimed water services to the Hassayampa Ranch Development.

D. Landowner is in the process of entitling and/or developing certain real property, as more fully described on Exhibit A hereto (the "Land") and, in connection therewith, desires (i) to engage Coordinator to provide various services including but not limited to arranging and coordinating for the Landowner the provision of wastewater utility services by HUC with respect to the Land pursuant to the terms and conditions hereinafter set forth, and (ii) work with HUC to include the Land in a new CC&N service area. Landowner may entitle and sell the land in multiple phases to entities for future development. Through Coordinator, Landowner has requested wastewater services from GWR, and GWR through HUC has agreed to provide such services to Landowner. Coordinator shall provide "will serve" letters and a notice of intent to serve from HUC for Landowner and file for CC&N Approval within 21 days of execution of this Agreement.

E. The parties acknowledge that the formation of the CC&N may not be finalized until such time as the appropriate Arizona Department of Environmental Quality ("ADEQ") and Maricopa Association of Governments ("MAG") permits and approvals are in place.

F. The parties acknowledge that it is a requirement of this Agreement for the Coordinator to facilitate an agreement between Landowner and HUC for HUC to provide reclaimed water and for the Landowner to accept and utilize reclaimed water for purposes of irrigation for the peak and off-peak periods.

G. The parties recognize and acknowledge that this Agreement is a financing and coordinating agreement only. The fees contemplated in this Agreement represent an approximation of the carrying costs associated with interest and capitalized interest associated with the financing of infrastructure for the benefit of the Landowner until such time as the rates associated from the provision of services within the areas to be served as contemplated by this agreement generate sufficient revenue to carry the on-going carrying costs for this infrastructure. Nothing in this Agreement should be construed as a payment of principal, a contribution or advance to the utilities and will bear no repayment of any kind or nature in the future.

H. The parties recognize that initially an 18.7 acre site for the Water Reclamation Facility ("WRF") was thought to be adequate, but that upon further evaluation, a 19.74 acre site
is required. The parties recognize, acknowledge and agree that this Agreement is contingent upon a 19.74 acre site for the WRF, being deeded to GWR, its nominee, or HUC conditional on acquiring all the necessary approvals. The additional 1.04 acres will be acquired by GWR, its nominee, or HUC in accordance with the provisions of paragraph 4.1. Landowner has allocated 19.74 acres of land (described on Exhibit “B” attached hereto and referred to as the “WRF Property”) to meet the wastewater needs of this planned development. It is a requirement of this Agreement that the Landowner provide evidence that this site is being held in trust within 120 days of the execution of this Agreement with specific instruction for the land to be deeded to GWR, its nominee, or HUC immediately following the CC&N approval for the provision of Utility Services. In the event HUC and/or Coordinator fails to satisfy and/or meet any and all CC&N conditions or other regulatory requirements within 24 months of the date of execution of this Agreement, such land shall revert to Landowner and HUC and/or Coordinator shall deed such land to Landowner. Land in the amount of 10.1 acres as shown on Exhibit “C” of this agreement (the “Option Property”) if required to meet the MAG208 regional plan, will be acquired by GWR, its nominee, or HUC. (GWR, its nominee, or HUC will have an option to purchase the Option Property from the Landowner for a period of five years from the date of signing this Agreement at a purchase price based upon Landowner’s basis in the land at the time of execution of the agreements, indexed on the CPI + 2%. The parties further understand and agree that the total amount of land provided under this paragraph shall not exceed 33.8 acres; and, that an easement of 280 feet (north/south) x 250 feet (east/west) within the regional wastewater achievement plant fronting on Indian School Road shall be dedicated by Landowner to Arizona Public Service Company for siting of an electrical substation to serve the Hassayampa Ranch Development.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Obligations of Coordinator. Upon execution of this Agreement, Coordinator shall undertake good faith efforts to initially form HUC, then facilitate, arrange and/or coordinate with HUC, as necessary, to provide Utility Services to Landowner, including without limitation,
obtaining all necessary permits and approvals from ACC, ADEQ and MAG to form the CC&N of HUC to include the Land. Coordinator shall cause HUC to provide Utility Services to Landowner for the Land, subject to applicable regulatory approvals. HUC will construct the appropriate wastewater treatment facilities to provide Utility Services to the Land for the approximate 6,000 equivalent residential dwelling units in addition to the golf course and the commercial, office and retail/light industrial uses in the masterplan.

2. **Coordination with HUC.** Coordinator shall make good faith efforts to arrange and obtain for Landowner from HUC the list of services more fully described on Exhibit D hereto, subject to obtaining the applicable regulatory approvals. Landowner or any successor to Landowner desiring the delivery of Utility Services to any portion of the Land must enter into a separate Wastewater Facilities Extension Agreements (the "Extension Agreement") with HUC, at the time any portion of the Land has received final plat approval from Maricopa County and the approved plat has been recorded ("Plat Approval"). Unless otherwise agreed by the parties, the Extension Agreement shall be in the form attached hereto as Exhibit E, subject to the approval of the ACC.

3. **Obligations of Landowner.** Landowner agrees to cooperate with Coordinator as reasonably requested by Coordinator and agrees to provide all information and documentation about the Land reasonably necessary for Coordinator to comply with its obligations under this Agreement. In addition, Landowner agrees to grant to HUC, all reasonably necessary easements and rights of way for the operation, maintenance and repair of the Utility Services. Such easements and rights of way shall be of adequate size, location and configuration so as to allow HUC ready and all weather access to all facilities for maintenance and repairs and other activities reasonably necessary to provide safe and reliable wastewater Utility Services.

4. **Payment Obligation for Infrastructure Coordination and Finance Fee.** Landowner, or its assigns in title and/or successors in title, shall pay upon the issuance of each building permit to Coordinator an interest and financing fee of $2,650.00 per equivalent dwelling unit ("EDU") in the Land (the "Landowner Payment"). Landowner’s payment shall be due for each EDU upon issuance of each building permit. This Landowner payment represents full and final compensation to the Coordinator in consideration for its services and performance of its covenants and agreements contained in this Agreement. The Landowner Payment shall be adjusted upward based on a CPI Factor, which is defined as the Consumer Price Index – United States City Average – for All Urban Consumers – All Items published by the United States Department of Labor, Bureau of Labor Statistics ("Index"), with the Index for the month of
January 2006 being treated as the base Index, plus two percent (2%). If the Index is discontinued or revised during the term of this Agreement, such other government index or computation with which it is replaced shall be utilized, and modified as necessary, to obtain substantially the same result as would be obtained if the Index had not been so discontinued or revised. For example, if the Landowner Payment was due in February 2007, and the most current available Index was 187.3 and the Index for January 2006 was 182.5, the unpaid Landowner Payment per EDU would be calculated as follows: $2,650 \times 187.3/182.5 \times 1.02 = $2,774. For the purposes of this Section 4, the number of EDUs within the Land shall be calculated as follows: (i) each single family residential lot issued a building permit shall constitute one (1) EDU and (ii) each gross acre of commercial or industrial property included shall constitute four point eight (4.8) EDUs. Following issuance of each building permit, Landowner (and any successor or assign in title to any interest in the Property) and Coordinator shall reconcile the amount paid under paragraph 4.2 below with the actual Landowner Payment due and Landowner, and/or any successor or assign in title to any interest in the Property, as applicable, shall pay to Coordinator or Coordinator shall pay to Landowner and/or any successor or assign in title to any interest in the Property, as applicable, as the case may be, the amount necessary to reconcile such payment.

4.1 Payment Obligations for Costs of Permits for Utility Services. The parties to this agreement agree that the various costs of permitting of the Utility Services will cost $500,000. Progress payments will be required throughout the design and permitting process to facilitate the necessary approvals of this project. The following amounts will be invoiced upon completion of the line items and are due and payable upon receipt to GWR as follows:

- $50,000 due upon signing of this Agreement;
- $75,000 due upon filing of the application for an Aquifer Protection Permit ("APP") with the ADEQ;
- $75,000 due upon the approval of the APP;
- $50,000 due upon filing of the Maricopa Association of Governments 208 Wastewater area wide plan amendment ("MAG208");
- $50,000 due upon approval of the MAG208;
- $50,000 due upon filing of the Arizona Pollutant Discharge Elimination System ("AZPDES") with the ADEQ;
- $50,000 due upon approval of the AZPDES;
• $50,000 due upon filing for the application for the formation of a CC&N with the ACC;
• $50,000 due upon approval of the CC&N;
A credit of $13,560 to remunerate Landowner for the additional 1.04 acres required by HUC for the WRF, per Section H above, will be made at such time the permitting activities described herein are complete, to be applied against the final $50,000 payment required at the CC&N approval.

4.2 Guaranteed Minimum Payment. The guaranteed minimum payment from the Landowner for Infrastructure Coordination and Finance Fees per quarter of 80 EDU’s shall commence upon substantial completion of the water reclamation facility and upon (i) issuance of the Aquifer Protection Permit by ADEQ, (ii) issuance of the Certificate of Convenience and Necessity by the Arizona Corporation Commission and (iii) issuance of the 208 Amendment by the Maricopa Association of Governments. Coordinator further agrees to issue a certificate of substantial completion for the water reclamation facility when the (1) the tanks and buildings have been constructed; (2) the mechanical equipment is delivered, constructed, fitted and tested for operation by Coordinator; (3) the control systems have been installed and verified as operational by Coordinator; and (4) the contractor has certified that the water reclamation facility is substantially complete in consultation with Coordinator. The parties further understand and agreed that the guaranteed minimum payments under this paragraph shall not be due and payable if the water reclamation facility is not operational by Coordinator for any reason. In the event the water reclamation facility has obtained any and all necessary approvals required for operation, the payments under this paragraph shall remain payable until 1,000 of the EDU’s are connected to the system and are actively being billed monthly. Under this paragraph, Coordinator acknowledges and agrees that Landowner shall be obligated to make payment only for the first 1,000 EDUs that are connected to the system and are actively being billed monthly. Coordinator acknowledges that Landowner intends to sell the land to other builders and developers who will make and assume the obligations for the Infrastructure Coordination and Finance Fee payments to Coordinator under this Agreement, including the guarantee obligations under this paragraph. In the event Landowner assigns, conveys or sells a portion of the Property to a successor entity as allowed by this Agreement, that successor entity shall be responsible for paying its pro rata or proportional share of the Guaranteed Minimum Payment under this
paragraph in place of Landowner. To the extent Coordinator receives payments from such builders or developers for amounts already paid to Coordinator by Landowner, Coordinator shall refund such amounts to Landowner. To the extent sales in any given quarter exceed 80 EDUs and payments are made under this Agreement, such payments shall be credited against Landowner’s guaranteed minimum payment obligation of 1,000 EDUs under this paragraph on a going forward basis. Finally, the parties understand and agree that the guaranteed minimum payment obligations shall be documented by a separate guarantee executed by the parties with the actual recorded landowner of the property as the guarantor for the payment obligations under this paragraph as set forth in the form attached as exhibit D.

4.3. Commencement of Construction for Water Reclamation Facility. Following satisfaction of the conditions and regulatory approvals set forth in ¶ 4.2 above, Landowner shall issue a notice to Coordinator to commence construction in Landowner’s sole discretion. Upon issuance of such notice, Coordinator shall commence construction of the water reclamation facility and achieve substantial completion within 12 months from the date of such notice. Coordinator shall obtain necessary construction permits for the water reclamation facility. Coordinator shall defend, indemnify and hold Landowner and any and all of Landowner’s affiliates, subsidiaries, successors, and/or related entities, including Hassayampa Ranch Ventures A, LLC, Hassayampa Ranch Ventures B, LLC, Hassayampa Ranch Ventures C, LLC, Hassayampa Ranch Ventures D, LLC, TVP Asset, Inc. and HRP Management, L.L.C., harmless for, from and against any and all liabilities, claims, damages, losses, costs, expenses (including, but not limited to, attorneys’ fees), injuries, causes of action, or judgments for bodily injury or death or damage to property occasioned, contributed to or in any way caused, in whole or in part, by Coordinator, its agents, employees, consultants, engineers, or contractors and which arise out of the performance of this Agreement by Coordinator or its authorized agents, employees, consultants, engineers and/or contractors. Coordinator’s duty to indemnify Landowner shall extend to all construction activities undertaken by Coordinator, and its contractors, subcontractors, agents, and employees in the performance of this Agreement. This indemnity clause shall apply solely to the extent that such claim, demand, liability and/or expense is attributable to the negligence, actions or inaction of Coordinator and/or its
contractors, subcontractors, consultants, engineers, agents and/or employees even if it is alleged or determined that Landowner is partially at fault for such claim.

Coordinator shall and/or cause its contractors and subcontractors to carry and maintain, at Coordinator’s sole cost and expense, during the duration of construction of the Project plus an additional one year, no less than the following coverage and limits of insurance:

(i) **Worker’s Compensation and Employer’s Liability:** (a) Worker’s Compensation coverage as required by law; and (b) Employer’s Liability with limits of at least $1,000,000 per occurrence.

(ii) **Business Automobile Liability for Bodily Injury and Property Damage:** $1,000,000 per occurrence, including coverage for all owned, non-owned and hired vehicles.

(iii) **Commercial General Liability for Bodily Injury and Property Damage:** $2,000,000 general aggregate, $1,000,000 per occurrence. Unless otherwise agreed by the parties, the general liability policy shall include a broad form comprehensive liability endorsement that includes coverage for liability assumed under any oral or written contract relating to this Agreement, and also including: (a) broad form property damage liability coverage; and (b) premises-operations coverage; and (c) independent contractor coverage (for liability may incur as a result of the operations, acts or omissions of Coordinator’s contractors, subcontractors, suppliers, and/or their agents or employees). The commercial general liability insurance required pursuant to this Agreement shall name Hassayampa Ranch Ventures, LLC, Hassayampa Ranch Ventures A, LLC, Hassayampa Ranch Ventures B, LLC, Hassayampa Ranch Ventures C, LLC, Hassayampa Ranch Ventures D, LLC, TVP Asset, Inc. and HRP Management, L.L.C. as additional insureds; (b) apply severally to the parties; (c) cover Landowner and affiliated entities as insureds in the same manner as if separate policies have been issued to each of them; (d) include a waiver of any and all subrogation rights against Landowner and affiliated entities; and (e) be primary insurance with any other valid and collectible insurance available to the aforesaid additional insureds constituting excess insurance.
(iv) **Professional Errors and Omissions Liability**, of not less than $1,000,000 per occurrence from Coordinator's Project engineer.

The policies required pursuant to this Agreement shall not be revised, canceled or reduced until at least thirty (30) days' written notice of such revision, cancellation or reduction shall have been given to Landowner. The policies required pursuant to this Agreement shall be issued by an insurance company that is authorized to transact business in the State of Arizona and that has a current rating of A-VII or better in Best's Insurance Report. Coordinator will provide Landowner with confirmation of the above insurance from Coordinator and any and all engineers, consultants, contractors and subcontractors, prior to commencement of construction, including copies of insurance certificates, riders and endorsements.

5. **Security.** Landowner is to provide security for the absorption guarantee in a form reasonably acceptable to GWR in its sole discretion.

6. **Sizing of Collection Mains.** Coordinator, from time to time may, at its own discretion, decide to oversize certain wastewater collection mains to service properties or planned developments not currently contemplated within the scope of this Land. Any and all cost of over sizing these lines will be at the sole cost of GWR, including any and all engineering or other costs incurred by Landowner as a result of such over sizing.

7. **Professional Services.** GWR agrees to use RBF Consulting to handle the MAG208 process. All other professionals will be coordinated by GWR, or its designate, in its sole discretion but subject to prior notice to Landowner. GWR will not exclude RBF Consulting or WRG Design, Inc. from possible selection of any third party work that it coordinates.

8. **Scope.** The contemplated agreement considers only the application, approval, construction, and ownership of treatment facilities, land and CC&N.
• All backbone infrastructures for wastewater and reclaimed water will be designed and constructed by others subject to inspection and approval by GWR, or its designate;

• All on-site infrastructure for wastewater and reclaimed water will be designed and constructed by others subject to inspection and approval by GWR, or its designate;

• All on-site infrastructure will be subject to partial refunds to the homebuilder or Landowner under the Line Extension Agreements;

• All backbone collection system mains and reclaimed water distribution mains will be refunded to the developer under the Line Extension Agreements.

The parties acknowledge that additional fees will be billed to the commercial and industrial end user based upon the ultimate use of the land and fixtures thereon. Fees payable to HUC, and reimbursement for certain costs and expenses incurred by Landowner with respect to the obtaining of Utility Services are not the subject of this Agreement and shall be paid and reimbursed to the appropriate parties in accordance with the Extension Agreements.

9. **No Partnership.** Coordinator is acting as an independent contractor pursuant to this Agreement. Nothing in this Agreement shall be interpreted or construed (i) to create an association, agency relationship, joint venture, or partnership among the parties or to impose any partnership obligation or liability upon either party, or (ii) to prohibit or limit the ability of Coordinator to enter into similar or identical agreements with other landowners, even if the activities of such landowners may be deemed to be in competition with the activities or Landowner.

10. **Default.**

(a) Landowner shall be deemed to be in material default under this Agreement upon the expiration of ten (10) days, as to monetary defaults, and thirty (30) days, as to non-monetary defaults, following receipt of written notice from Coordinator specifying the particulars in which a default is claimed unless, prior to expiration of the applicable grace period
(ten (10) days or thirty (30) days, as the case may be), such default has been cured.

(b) In the event either party to this Agreement is in material default, the provisions hereof may be enforced by any remedy permitted by law for specific performance, injunctive, or other equitable remedies in addition to any other remedy available at law or in equity. In this regard, in the event Landowner fails to pay any amount as and when due (including the Landowner Payment), which failure is not cured within ten (10) days after notice thereof in accordance with the provisions of Section 6(a) above, such delinquent amounts shall bear interest at the rate of fifteen percent (15%) per annum from the due date until paid. In addition, to the extent such sums remain unpaid following such ten (10) day period, Coordinator may claim a contractual lien for such sum, together with interest thereon as set forth above, which may be foreclosed against only that portion of the Land owned by the defaulting landowner in the manner prescribed by law for the foreclosure of realty mortgages; Coordinator agrees that as and when portions of the Property are sold, the obligations hereunder shall be bifurcated based on the land area sold and each landowner shall be solely (and not jointly) responsible for all sums owed with respect to the land areas that it owns and shall not have any obligation or liability for the failure of any other owner of any portion of the Land.

(c) Subject to the limitations described in the last sentence of the subsection (b) above, amounts owed but not paid when due by Landowner shall be a lien against the Land that the parties agree shall relate back to the date upon which an executed copy of this Agreement is recorded in the Maricopa County Recorders Office along with a document entitled Preliminary Notice of Contractual Lien which sets forth:

i. The name of the lien claimant;

ii. the name of the party or then owner of the property or interest against which the lien is claimed;

iii. and a description of the property against which the lien is claimed.

Coordinator understands that Landowner has not yet closed on its purchase of the land subject to this Agreement and such purchase currently is in escrow. As a result, Coordinator may not record this Agreement with the Maricopa County Recorder until (a) Landowner has closed on its purchase of the Land and assumed title or (b) the current property owner has consented in writing to recordation of this Agreement against the land.
(d) The lien shall take effect only upon recordation of a claim of contractual lien as described below in the office of the Maricopa County Recorder by Coordinator, and shall relate back to the date when the Preliminary Notice of Contractual Lien and executed copy of the Agreement were recorded, as set forth in paragraph (c) above. Coordinator acknowledges and agrees to work with the Master Developer for the Project and its lenders to the extent reasonably necessary to subordinate this agreement to allow additional financing to occur. Coordinator shall give written notice of any such lien. The Notice and Claim of Contractual Lien shall include the following:

(i) The name of the lien claimant.

(ii) The name of the party or then owner of the property or interest against which the lien is claimed.

(iii) A description of the property against which the lien is claimed.

(iv) A description of the default or breach that gives rise to the claim of lien and a statement itemizing the amount of the claim.

(v) A statement that the lien is claimed pursuant to the provisions of this Agreement and reciting the date of recordation and recorder’s document number of this Agreement.

(vi) The notice shall be acknowledged, and after recordation, a copy shall be given to the person against whose property the lien is claimed in any manner prescribed under Section 15 of this Agreement. The lien may be enforced in any manner allowed by law, including without limitation, by an action to foreclose a mortgage or mechanic’s lien under the applicable provisions of the laws of the State of Arizona.

(e) If the Landowner posts either (i) a bond executed by a fiscally sound corporate surety licensed to do business in the State of Arizona, or (ii) an irrevocable letter of credit from a reputable financial institution licensed to do business in the State of Arizona reasonably acceptable to Coordinator, which bond or letter of credit (a) names Coordinator as the principal or payee and is in form satisfactory to Coordinator, (b) is in the amount of one and one-half (1-\(\frac{1}{2}\)) times the claim secured by the lien, and (c) unconditionally provides that it may be drawn on
by Coordinator in the event of a final judgment entered by a court of competent jurisdiction in favor of Coordinator, then Coordinator shall record a release of the lien or take such action as may be reasonably required by a title insurance company requested to furnish a policy of title insurance on such property to delete the lien as an exception thereto. Landowner shall post the bond or letter of credit by delivery of same to Coordinator. All costs and expenses to obtain the bond or letter of credit, and all costs and expenses incurred by Coordinator, shall be borne by Landowner, unless Landowner is the prevailing party in any litigation challenging the claimed lien.

11. **Nona Issuance of CC&N Expansion.** In the event that Coordinator and HUC are unable to obtain all of the necessary approvals from the ACC and ADEQ within twenty-four (24) months of the execution of this Agreement, then the Landowner or Coordinator at either party's option may terminate this Agreement without recourse to either party. In the event of termination of the Agreement, Coordinator shall remove or cause to be removed any registration or recordation of this Agreement with Maricopa County and waive any lien rights it may have under this Agreement.

12. **Attorneys' Fees.** If any dispute arises out of the subject matter of this Agreement, the prevailing party in such dispute shall be entitled to recover from the other party its reasonable costs, expenses and attorney's fees incurred in litigating, arbitrating, or otherwise resolving such dispute. The parties' obligations under this Section shall survive the closing under this Agreement.

13. **Applicable Law; Venue; Jurisdiction.** This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona, notwithstanding any Arizona or other conflict-of-law provisions to the contrary. The parties consent to jurisdiction for purposes of this Agreement in the State of Arizona, and agree that Maricopa County, Arizona, shall be proper venue for any action brought with respect to this Agreement.

14. **Interpretation.** The language in all parts of this Agreement shall in all cases, be construed as a whole according to its fair meaning and not strictly for nor against any party. The section headings in this Agreement are for convenience only and are not to be construed as a part hereof. The parties agree that each party has reviewed this Agreement and has had the opportunity to have counsel review the same and that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not apply in the interpretation of this Agreement or any amendments or any exhibits thereto. Except where specifically provided
to the contrary, when used in this Agreement, the term "including" shall mean without limitation by reason of enumeration. All pronouns and any variations thereof shall be deemed to refer to masculine, feminine or neuter, singular or plural, as the identity of the person(s) or entity(ies) may require.

15. **Counterparts.** This Agreement shall be effective upon execution by all parties hereto and may be executed in any number of counterparts with the same effect as if all of the parties had signed the same document. All counterparts shall be construed together and shall constitute one agreement.

16. **Entire Agreement.** This Agreement constitutes the entire integrated agreement among the parties pertaining to the subject matter hereof, and supersedes all prior and contemporaneous agreements, representations, and undertakings of the parties with respect to such subject matter. This Agreement may not be amended except by a written instrument executed by all parties hereto.

17. **Additional Instruments.** The parties hereto agree to execute, acknowledge, and deliver to each other such other documents and instruments as may be reasonably necessary or appropriate to evidence or to carry out the terms of this Assignment.

18. **Severability.** Every provision of this Agreement is intended to be severable. If any term or provision hereof is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity or legality of the remainder of this Agreement.

19. **Incorporation by Reference.** Every exhibit, schedule and other appendix attached to this Agreement and referred to herein is hereby incorporated in this Agreement by reference.

20. **Notices.** Any notice, payment, demand or communication required or permitted to be given by any provision of this Agreement shall be in writing and shall be delivered personally to the party to whom the same is directed or sent by registered or certified mail, return receipt requested, addressed to the addresses set forth on the signature page hereof. Any such notice shall be deemed to be delivered, given and received for all purposes as of the date so delivered if delivered personally, or three business days after the time when the same was deposited in a regularly maintained receptacle for the deposit of United States mail, if sent by registered or certified mail, postage and charges prepaid, or if given by any other method, upon actual receipt; provided that notwithstanding the foregoing, notice of any change of address shall
be effective only upon actual receipt of such notice.

21. **Binding Effect; Partial Releases.** This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the respective parties. This Agreement constitutes a covenant running with the land, shall be binding upon the Land for the benefit of Coordinator, its successors and assigns and any person acquiring any portion of the Land, upon acquisition thereof, shall be deemed to have assumed the obligations of Landowner arising from this Agreement with respect only to that portion of the Land acquired without the necessity for the execution of any separate instrument. If phases and/or parcels within the Land are sold individually, Coordinator will ensure that at such time as the Landowner Payment has been paid in full for that particular phase and/or parcel, Coordinator shall release this Agreement of record from that particular phase and/or parcel, without releasing the Agreement from any other portion of the Land for which the Landowner Payment has not been paid in full. It is the intent of this Agreement to release that portion of any lien which relates to parcels and or plats that are paid in full.

22. **Option to Purchase.** Landowner hereby grants Coordinator the option to purchase the “Option Property” as defined in recital H above. Coordinator shall have the right to purchase the Option Property at any time within five (5) years of the date of this Agreement. Any such purchase shall close within five (5) years of the date of this Agreement, such closing to occur within ninety (90) days of Coordinator giving Landowner written notice of its election to exercise such option. If the closing does not occur within this time-frame, then the option shall thereafter expire unless the five (5) years has not yet passed in which event the Coordinator shall have the right to re-exercise the option on the terms set forth herein so long as the closing occurs within five (5) years of the date of this Agreement. The option purchase price shall be the Landowner's basis in the land at the time of execution of the agreements, $13,000 per acre, indexed on the CPI + 2%, payable in cash at closing. The closing costs shall be apportioned between the parties as is customary with Landowner bearing the cost of a standard owner’s title insurance policy in the amount of the purchase price. The purchase of the Option Property shall close through an escrow opened with Lawyer’s Title Insurance Company.

[Signatures are on the following page.]
IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first above written.

COORDINATOR:
Global Water Resources, LLC
a Delaware Limited Liability Company

By: Cindy M. Lies
Vice-President

LANDOWNER:

HASSAYAMPA RANCH VENTURES, LLC,
a Delaware limited liability company

By: Troxler Residential Ventures XXIX, LLC,
a Delaware limited liability company
its Managing Member
By: Troxler Ventures Partners II, Inc.,
a California corporation
its Operating Member

By: Bryan P. Troxler
President
IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first above written.

COORDINATOR:
Global Water Resources, LLC
a Delaware Limited Liability Company

By: [Signature]
Cindy M. Likes
Vice-President

LANDOWNER:

HASSAYAMPA RANCH VENTURES, LLC,
a Delaware limited liability company

By: Troxler Residential Ventures XXIX, LLC,
a Delaware limited liability company
its Managing Member
By: Troxler Ventures Partners II, Inc.,
a California corporation
its Operating Member

By: [Signature]
Bryan P. Troxler
President
STATE OF ARIZONA

COUNTY OF MARICOPA

On June 24, 2005, before me, JESSIE CRITCHFIELD, a Notary Public in and for said State, personally appeared CINDY N. WILDE, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument, the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public in and for said State

My Commission Expires:

4/18/2009

STATE OF ARIZONA
COUNTY OF MARICOPA

On ____________, before me,__________________________________________, a Notary Public in and for said State, personally appeared ____________________________________________, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument, the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public in and for said State

My Commission Expires:
STATE OF ARIZONA

) ss.
County of Maricopa

On June 27, 2005, before me, Michelle K. McClure, a Notary Public in and for said state, personally appeared Bryan P. Troxler, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument, the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]

My Commission Expires:

__________________________

STATE OF ARIZONA

) ss.
County of Maricopa

On ____________, before me, ________________________, a Notary Public in and for said state, personally appeared______________________________, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument, the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]

My Commission Expires:

__________________________
EXHIBIT A
INFRASTRUCTURE COORDINATION, FINANCE AND OPTION AGREEMENT

LEGAL DESCRIPTION OF LAND

No. 773-11/255-PB3

EXHIBIT "A"

PARCEL NO. 1:
ALL OF SECTION 15, TOWNSHIP 2 NORTH, RANGE 5 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN COUNTY, ARIZONA.

PARCEL NO. 2:

PARCEL NO. 3
ALL OF SECTION 16, TOWNSHIP 2 NORTH, RANGE 5 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN COUNTY, ARIZONA;
EXCEPT THE NORTH HALF OF THE NORTHEAST QUARTER OF SAID SECTION; AND
EXCEPT ALL THE MINERAL INTEREST RESERVED TO THE STATE OF ARIZONA IN AND TO THE FOLLOWING LAND BY THE FOLLOWING INSTRUMENT;
AS TO THE SOUTH HALF OF SECTION 16, TOWNSHIP 2 NORTH, RANGE 5 WEST BY DEED DATED NOVEMBER 12, 1941 AND RECORDED AT BOOK 366 OF DEEDS, PAGE 563, RECORDS OF MARICOPA COUNTY, ARIZONA; AND
EXCEPT ALL THE MINERAL INTEREST RESERVED TO THE STATE OF ARIZONA IN AND TO THE FOLLOWING LAND BY THE FOLLOWING INSTRUMENT;
AS TO THE NORTHEAST QUARTER OF SECTION 16, TOWNSHIP 2 NORTH, RANGE 5 WEST BY DEED DATED MARCH 3, 1939 AND RECORDED AT BOOK 331 OF DEEDS, PAGE 569, RECORDS OF MARICOPA COUNTY, ARIZONA; AND
EXCEPT ALL THE MINERAL INTEREST RESERVED TO THE STATE OF ARIZONA IN AND TO THE FOLLOWING LAND BY THE FOLLOWING INSTRUMENT;
AS TO THE NORTHWEST QUARTER OF SECTION 16, TOWNSHIP 2 NORTH, RANGE 5 WEST, BY DEED DATED MAY 11, 1949 AND RECORDED AT Docket 401, Page 326, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 4:
THE EAST HALF OF SECTION 17, TOWNSHIP 2 NORTH, RANGE 5 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 5 (ITU Parcel):
THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 16, TOWNSHIP 2 NORTH RANGE 5 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.
EXHIBIT "B"

Legal Description of WRF Property
EXHIBIT “B”
WRF PROPERTY

THE SOUTH 860.00 FEET OF THE EASTERLY 1000.00 FEET OF THE
SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 22,
TOWNSHIP 2 NORTH, RANGE 5 WEST, GILA & SALT RIVER BASE AND
MERIDIAN, MARICOPA COUNTY, ARIZONA.

CONTAINS 19.74 ACRES, MORE OR LESS.
EXHIBIT B
PAGE 2
2.75 MGD WATER RECLAMATION FACILITY

1.6 ac. APS Bile
19.74 ac WRF SITE

Development Master Plan for:
HASSAYAMPA RANCH

© 1995 SWARForever

SWARACK PARTNERS
Architects & Planners

10435 W. Southern Ave.
Phoenix, Arizona 85043
www.swarack.com
EXHIBIT "C"

Legal Description of WRF Option Property
EXHIBIT “C”
OPTION PROPERTY

THE NORTH 440.00 FEET OF THE SOUTHERLY 1300.00 FEET OF THE
EASTERLY 1000.00 OF THE SOUTHWEST QUARTER OF THE SOUTHEAST
QUARTER OF SECTION 22, TOWNSHIP 2 NORTH, RANGE 5 WEST, GILA &
SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

CONTAINS 10.10 ACRES, MORE OR LESS.
EXHIBIT D
INFRASTRUCTURE COORDINATION, FINANCE AND OPTION AGREEMENT

DESCRIPTION OF HUC SERVICES TO BE COORDINATED BY COORDINATOR

- Form a CC&N wastewater service area to include the Land
- Approve a master wastewater plan with respect to the Land to be developed by Landowner
- Approve a master reclaimed water treatment, retention, and distribution plan.
- Develop sufficient wastewater plant capacity for the Land
- Provide all permitting and regulatory approvals including but not limited to an Aquifer Protection Permit and Maricopa Association of Governments (MAG) 208 Water Quality Plan as necessary.
- Provide will-serve letters and notices of intent to serve to applicable governmental agencies necessary for final plat approvals with a schedule of commitment dates personalized for the Land
- Provide expedited final subdivision plat wastewater improvement plan check and coordination with the Arizona Department of Environmental Quality for Approvals to Construct
- Obtain/Develop facilities extension agreement for construction of infrastructure within the Land (subject to reimbursement)
EXHIBIT E

INFRASTRUCTURE COORDINATION, FINANCE AND OPTION AGREEMENT

LINE EXTENSION AGREEMENT – HASSAYAMPA UTILITIES COMPANY

SEWER FACILITIES EXTENSION AGREEMENT

This Agreement is made this ___ day of ______________, 2005 by and between HASSAYAMPA UTILITIES COMPANY an Arizona corporation (“Company”), ______________, an ______________ (“Developer”).

RECORDS:

A. Developer desires that sewer utility service be extended to and for its real estate development located in Parcel ___ of ______________ consisting of ___ (single family, multi-family or commercial) lots, in Maricopa County within the general vicinity of the City of ________, Arizona (the "Development"). A legal description for the Development is attached hereto as Exhibit "1" and incorporated herein by this reference. The Development is located within Company’s Certificate of Convenience and Necessity (“CC&N”).

B. Company is a public service corporation as defined in Article XV, Section 2 of the Arizona Constitution which owns and operates a sewage treatment plant and collection system and holds a CC&N from the Commission granting Company the exclusive right to provide sewer utility service within portions of Maricopa County, Arizona.

C. Developer is willing to construct and install facilities within the Development necessary to extend sewer utility service to and within the Development which facilities shall connect to the Company’s system as generally shown on the map attached hereto as Exhibit “2.” Company is willing to provide sewer utility service to the Development in
accordance with relevant law, including the rules and regulations of the Commission on the condition that Developer fully and timely perform the obligations and satisfy the conditions and requirements set forth below.

COVENANTS AND AGREEMENTS:

NOW, THEREFORE, in consideration of the following covenants and agreements, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. **Construction of Facilities.** Developer agrees to construct and install sewage collection mains, manholes, pumping stations and/or such other facilities and improvements necessary to provide sewer utility service to each lot or building within the Development as more particularly described in Exhibit “3” attached hereto and incorporated herein by this reference (referred to hereinafter as the "Facilities"). The Facilities shall connect to the Company’s system at the point shown on the approved plans as generally depicted on the map attached hereto as Exhibit “2,” and shall be designed and constructed within the Development in a manner which allows the provision of safe and reliable sewer utility service to each lot therein. Subject to the terms and conditions set forth herein (including, without limitation, Company's rights of plan review and approval and inspection of final construction), Developer shall be responsible for all construction activities associated with the Facilities, and Developer shall be liable for and pay when due all costs, expenses, claims and liabilities associated with the construction and installation of the Facilities.

2. **Construction Standards and Requirements.** The Facilities shall meet and comply with Company's standards and specifications, and all engineering plans and
specifications for the Facilities shall be approved by Company and its engineers ("Company’s Engineer") prior to the commencement of construction. Company and Company’s Engineer shall review the plans and specifications and shall provide any requirements or comments as soon as practicable. Developer shall require that its contractor be bound by and conform to the plans and specifications for the Facilities as finally approved by Company. The construction and installation of the Facilities shall be in conformance with the applicable regulations of the Arizona Department of Environmental Quality ("ADEQ"), the Commission, and any other governmental authority having jurisdiction there over.

3. **Right of Inspection; Corrective Action.** Company shall have the right to have Company’s Engineer inspect and test the Facilities at reasonable times during the course of construction as necessary to ensure conformance with plans and specifications. If at any time before the final acceptance by Company of the Facilities any construction, materials or workmanship are found to be defective or deficient in any way, or the Facilities fail to conform to this Agreement, then Company may reject such defective or deficient construction, materials and/or workmanship and require Developer to fully pay for all necessary corrective construction efforts ("Corrective Action"). Company reserves the right to withhold approval and to forbid connection of any defective portion of the Facilities to Company’s system unless and until the Facilities have been constructed in accordance with plans and specifications and all applicable regulatory requirements. Further, Developer shall promptly undertake any Corrective Action required to remedy such defects and deficiencies in construction, materials and workmanship upon receipt of notice by Company. The foregoing notwithstanding, Company shall not unreasonably withhold or delay acceptance of the Facilities.

4. **Transfer of Ownership.** Upon completion and approval of the as-
built Facilities by Company and any other governmental authority whose approval is required, Developer shall transfer all right, title and interest in the Facilities to Company via a bill of sale in a form satisfactory to Company. Company, in its sole discretion, may require Developer to conduct a video inspection of any of the Facilities prior to final approval and acceptance to ensure that no breaks or similar defects exist. Thereafter, Company shall be the sole owner of the Facilities and be responsible for their operation, maintenance and repair. Company's ownership and responsibility shall include all pumping stations, manholes, collection and transmission mains and/or related appurtenances within the Development up to the point of connection of the sewer line of each customer receiving service to the collection main. Maintenance and repair of each sewer service line, which lines are not part of the Facilities, shall be Developer's, the Development's or each individual customers' responsibility. All work performed by or on behalf of Developer shall be warranted by Developer for one year from the date of transfer of the Facilities to Company against defects in materials and workmanship. Developer shall also covenant, at the time of transfer, that the Facilities are free and clear of all liens and encumbrances, and unless the time period for filing lien claims has expired, shall provide evidence in the form of lien waivers that all claims of contractors, subcontractors, mechanics and materialmen have been paid and satisfied.

5. **Final As-Built Drawings and Accounting of Construction Costs.**

Immediately following completion and approval of the Facilities, Developer shall provide Company with three sets of as-built drawings and specifications for the Facilities and a reproducible copy of such drawings. Developer shall also provide an accounting of the cost of constructing and installing the Facilities, which amount shall be refundable in accordance with paragraph 8, below. Company shall have no obligation to furnish service to the Development or
to accept the transfer of the Facilities until Developer has complied with this paragraph.

6. **Easements.** Developer shall be responsible for obtaining all necessary easements and rights-of-way for the construction and installation, and subsequent operation, maintenance and repair of the Facilities. Such easements and rights-of-way shall be of adequate size, location, and configuration so as to allow Company ready access to the Facilities for maintenance and repairs and other activities necessary to provide safe and reliable sewer utility service. Evidence of such easements and rights-of-way shall be provided to Company by Developer at the same time as Developer transfers ownership of the Facilities pursuant to paragraph 4, above. At the time of transfer, all easements and rights-of-way shall be free of physical encroachments, encumbrances or other obstacles. Company shall have no responsibility to obtain or secure on Developer's behalf any such easements or rights-of-way.

7. **Reimbursement for Engineering and Other Fees and Expenses.** Developer shall also reimburse Company for the costs, expenses and fees, including legal fees and costs that are incurred by Company for preparation of this Agreement, for reviewing and approving the plans and specifications for the Facilities to be constructed by Developer, for inspecting the Facilities during construction and other supervisory activities undertaken by Company, for obtaining any necessary approvals from governmental authorities (collectively the "Administrative Costs"). For such purpose, at the time of the signing of this Agreement, the Developer will pay an advance to Company of Seven Thousand Five Hundred Dollars ($7,500). Developer shall provide additional advances to Company, as may be requested by Company in writing from time-to-time, to reimburse Company for any additional Administrative Costs it incurs. All amounts paid to Company pursuant to this provision shall constitute advances in aid of construction and be subject to refund pursuant to paragraph 8, below.
8. **Refunds of Advances.** Company shall refund annually to Developer an amount equal to ten percent (10.0%) of the gross annual revenues received by Company from the provision of sewer utility service to each bona fide customer within the Development for the first ten (10) years and seven (7%) thereafter. Such refunds shall be paid by Company on or before the first day of August, commencing in the fourth calendar year following the calendar year in which title to the Facilities is transferred to and accepted by Company and continuing thereafter in each succeeding calendar year for a total of twenty-two (22) years. No interest shall accrue or be payable on the amounts to be refunded hereunder, and any unpaid balance remaining at the end of such twenty-two year period shall be non-refundable. In no event shall the total amount of the refunds paid by Company hereunder exceed the total amount of all advances made by Developer hereunder. For the purposes of this provision, the total amount of Developer's advances shall be equal to Developer's actual cost of constructing the Facilities, less the costs of any corrective action as defined in paragraph 3 above, the costs of curing any defects arising during the warranty period, as provided herein, and the costs of any unreasonable overtime incurred in the construction of the Facilities, above, and the amounts paid by Developer to Company for Administrative Costs pursuant to paragraph 7, above.

9. **Company's Obligation to Serve.** Subject to the condition that Developer fully performs its obligations under this Agreement, Company shall provide sewer utility service to all customers within the Development in accordance with Company's tariffs and schedule of rates and charges for service, the rules and regulations of the Commission and other regulatory authorities and requirements. However, Company shall have no obligation to accept and operate the Facilities in the event Developer fails to make any payment provided in this Agreement, fails to construct and install the Facilities in accordance with Company's standards
and specifications and in accordance with the applicable rules and regulations of ADEQ, the Commission or any other governmental authority having jurisdiction there over, or otherwise fails to comply with the terms and conditions of this Agreement. Developer acknowledges and understands that Company will not establish service to any customer within the Development until such time as Company has accepted the transfer of the Facilities, and all amounts that Developer is required to pay Company hereunder have in fact been paid. The foregoing notwithstanding, the Company shall not terminate service to any customer within the Development to whom service has been properly established as a consequence of any subsequent breach or nonperformance by Developer hereunder.

10. **Liability for Income Taxes.** In the event it is determined that all or any portion of Developer’s advances in aid of construction hereunder constituted taxable income to Company as of the date of this Agreement or at the time Company actually receives such advances hereunder, Developer will advance funds to Company equal to the income taxes resulting from Developer’s advance hereunder. These funds shall be paid to Company within twenty (20) days following notification to Developer that a determination has been made that any such advances constitute taxable income, whether by virtue of any determination or notification by a governmental authority, amendment to the Internal Revenue Code, any regulation promulgated by the Internal Revenue Service, or similar change to any statute, rule or regulation relating to this matter. Such notification shall include documentation reasonably necessary to substantiate the Company’s liability for income taxes resulting from the Developer’s advances in aid of construction under this Agreement. In the event that additional funds are paid by Developer under this paragraph, such funds shall also constitute advances in aid of construction. In addition, Developer shall indemnify and hold Company harmless for, from and against any tax
related interest, fines and penalties assessed against Company and other costs and expenses
incurred by Company as a consequence of late payment by Developer of amounts described
above.

11. **Notice.** All notices and other written communications required
hereunder shall be sent to the parties as follows:

**COMPANY:**

Hassayampa Utilities Company,
Attn: Cindy M. Liles, Vice President
22601 N. 19th Avenue
Suite 210
Phoenix, Arizona 85027

**DEVELOPER:**

Each party shall advise the other party in writing of any change in the manner in which
notice is to be provided hereunder.

12. **Governing Law.** This Agreement, and all rights and obligations
hereunder, shall be subject to and governed by the rules and regulations of the Commission
relating to domestic sewer utilities and generally shall be governed by and construed in
accordance with the laws of the State of Arizona. Developer understands and acknowledges that
Company's rates and charges, and other terms and conditions applicable to its provision of utility
service, may be modified from time-to-time by order of the Commission. Company shall
provide Developer with copies of such orders that may affect Developer's rights and obligations
hereunder.
13. **Time is of the Essence.** Time is and shall be of the essence of this Agreement.

14. **Indemnification: Risk of Loss.** Developer shall indemnify and hold Company harmless for, from and against any and all claims, demands and other liabilities and expenses (including attorneys' fees and other costs of litigation) arising out of or otherwise relating to Developer's failure to comply with any of the terms and conditions contained herein, including (without limitation) Company's refusal to serve any unit within the Development based on Developer's failure to pay all amounts required hereunder in a timely manner. Developer's duty to indemnify Company shall extend to all construction activities undertaken by Developer, its contractors, subcontractors, agents, and employees hereunder. This indemnity clause shall apply solely and exclusively to the extent that such claim, demand, liability and/or expenses is attributable to the actions or inaction of Developer and/or its contractors, subcontractors, agents and/or employees. This indemnity clause shall not apply to the extent such claim, demand, liability and/or expense is attributable to Company, GWR and/or any other third party.

15. **Successors and Assigns.** This Agreement may be assigned by either of the parties provided that the assignee agrees in writing to be bound by and fully perform all of the assignor's duties and obligations hereunder. This Agreement and all terms and conditions contained herein shall be binding upon and shall inure to the benefit of the successors and assigns of the parties.

16. **Dispute Resolution.** The parties hereto agree that each will use good faith efforts to resolve, through negotiation, disputes arising hereunder without resorting to mediation, arbitration or litigation.

17. **Integration: One Agreement.** This Agreement supersedes all prior
agreements, contracts, representations and understandings concerning its subject matter, whether written or oral.

18. **Attorneys' Fees.** The prevailing party in any litigation or other proceeding concerning or related to this Agreement, or the enforcement thereof, shall be entitled to recover its costs and reasonable attorneys' fees.

19. **Authority to Perform.** Company represents and warrants to Developer that Company has the right, power and authority to enter into and fully perform this Agreement. Developer represents and warrants to Company that Developer has the right, power and authority to enter into and fully perform this Agreement.
DEVELOPER:

________________________

________________________

By ______________________
   Its ____________________

COMPANY:

HASSAYAMPA UTILITIES COMPANY
an Arizona corporation

By ______________________
   Cindy M. Liles
   Its: Vice President
EXHIBIT "1"
Legal Description
EXHIBIT "2"
Point(s) of Connection
EXHIBIT “3”

Wastewater Facilities Budget
(Required to be completed by Developer prior to execution of agreement)

<table>
<thead>
<tr>
<th>Item</th>
<th>QTY</th>
<th>UNIT</th>
<th>UNIT $</th>
<th>TOTAL $</th>
</tr>
</thead>
<tbody>
<tr>
<td>8” SDR 35 Sewer Main</td>
<td></td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10” SDR 35 Sewer Main</td>
<td></td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4’ Manhole</td>
<td></td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewer Cleanout</td>
<td></td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4” Sewer Service</td>
<td></td>
<td>EA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subtotal
Sales Tax
Total
Belmont
May 9, 2006

Ms. Cindy Liles
Hassayampa Utility Company
21410 N 19th Ave, #201
Phoenix, AZ 85027

RE: Belmont

Dear Ms. Liles:

As you are aware we own Belmont, an approximately 20,000 acre Master planned Community that has signed a letter of intent with your parent company to provide water and wastewater services to our development.

Belmont is not currently in any utility company’s Certificate of Convenience and Necessity nor is Belmont located within the municipal boundaries of Buckeye, Arizona. We intend to develop in the county and as such desire a reputable private utility to provide water and wastewater services.

Last year we put out a detailed request for proposal to the top private utility providers in Arizona and the Western United States. We narrowed the list, interviewed our top three and from those interviews chose you. Your capital structure, personnel and success in newly developing areas such as Maricopa, Arizona, were among the factors that influenced our decision.

We do not object and actually encourage you to include us in the integrated, regional 208 plan for the area west of the Hassayampa River. We are encouraged by your mandate to maximize water conservation by requiring the developments to use reclaimed water at a minimum for golf courses, school grounds and areas owned and maintained by home owner associations. We are also interested in your concept of installing two meters at every home; one for potable water and one for reclaimed water for exterior purposes. We look forward to learning more about this process.

Hopefully everyone will see the greater benefit of developing regional infrastructure rather than having smaller land owners and developers propose independent solutions. Obviously we believe you are the best company to execute these regional plans.

William D. Ring
WDR/fh
November 27, 2006

Ken James, P.E.
Senior Civil Engineer
Maricopa County Environmental Services Department
1001 N. Central Avenue, Suite #150
Phoenix, Arizona 85004

Re: HUC NE 208 Plan Amendment, October 10, 2006
Campus 3 and 4 WRF Site Ownership

Dear Mr. James:

As you know, the owners of the Belmont property are working with Global Water Resources ("Global") to finalize an agreement (the "Agreement") for Hassayampa Utility Company ("HUC"), Global's subsidiary, to provide wastewater and reclaimed water service to the Belmont development. For the purposes of the 208 submittal, we want to formally confirm that Global/HUC has the right to plan two regional water reclamation facilities ("WRF"), known as the Campuses 3 and 4 WRF in the Draft HUC NE 208 Amendment application ("HUC NE 208"), on the approximately 29.3 and 31.2 acre sites, respectively, described in the HUC NE 208. These sites have also been shown on the amended Development Master Plan as parcel 1.23 in Village 1 and parcel 4.18 in Village 4 which is scheduled to be heard by the Maricopa County Board of Supervisors on December 6, 2006.

Once the Agreement has been finalized, the HUC NE 208 Plan Amendment is approved, and a Certificate of Convenience and Necessity is granted by the Corporation Commission, to allow HUC's provision of wastewater and reclaimed water service to the Belmont Development, we will prepare special warranty deeds to transfer the ownership of these sites to Global/HUC.

I trust this satisfies your request in the November 17, 2006 Second Review Comments for evidence of Global ownership or legal right to purchase the WRF sites. If you require additional information, please contact Bill Ring at 480-951-1281.

Sincerely,

BELMONT LKY 20K LIMITED PARTNERSHIP
L.L.L.P., an Arizona limited liability limited partnership

By LKY REAL ESTATE BELMONT, L.L.C., an
Arizona limited liability company,
its General Partner.

By

Its MANAGER

Cc: Trevor Hill, Global/HUC
Robin Bain, Global/HUC

51148-0048/LEGAL12550725.2
AGREEMENT

This Agreement ("Agreement") is by and between BELMONT OWNERSHIP GROUP ("Belmont"), whose address is 5040 East Shea Boulevard, Suite 254, Scottsdale, Arizona 85254 and GLOBAL WATER RESOURCES, LLC, an Arizona limited liability company ("Global"), whose address is 21410 North 19th Avenue, Suite 201, Phoenix, Arizona 85027.

WHEREAS, Belmont is in the process of developing a mixed use master planned community in western Maricopa County, Arizona encompassing approximately 24,800 acres to be known as Belmont ("Project");

WHEREAS, as part of the Project Belmont will need to have waste water treatment facilities ("Waste Water Facilities") to service the Project and has identified certain locations for the installation, construction and operation of such Waste Water Facilities more particularly described in Exhibit A attached hereto and made a part hereof (the "Property");

WHEREAS, Global has agreed to install, construct, and operate the Waste Water Facilities provided Belmont conveys the Property to Global; and

WHEREAS, Belmont has agreed to convey the Property to Global.

NOW, THEREFORE, in consideration of the promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows:

1. Recitals. The Recitals are hereby incorporated into this Agreement and are made a part hereof.

2. Conveyance. Belmont hereby agrees to convey all right, title and interest by quit claim deed in and to the Property to Global in "as is" "where is" condition. Belmont makes no representations or warranties, covenants, or guarantees of any kind regarding the value or condition of the Property except that it has title to the Property and the Property is free and clear of financial encumbrances.

3. Utilization of Property. Global hereby agrees to provide wastewater treatment capacity as specified in the phasing plans of the approved Wastewater Master Plan for Belmont, Maricopa County dated August 8, 2006 or as development dictates, whichever is greater, for which the schedule will be adjusted as necessary, contingent on approval of a MAG 208 Amendment which includes the Project and upon receiving a Certificate of Convenience & Necessity which includes the Project. Global reserves the right to provide such capacity at other facilities within the approved 208 and CC&N, until or unless Global deems it necessary to utilize any portion of the Property to meet its capacity obligations for the Project.

4. Default. In the event either Belmont or Global default under their respective obligations hereunder, and following not less than (60) days' written notice, the non-defaulting party shall have all the rights and remedies under law and in equity including, but not limited to, the right to enforce specific performance of this Agreement.
5. **Assignment.** Neither party shall have the right to assign its rights and obligations hereunder without the prior written consent of the other party.

6. **Attorneys' Fees.** In the event of any action or proceeding brought by either party against the other under this Agreement, the prevailing party shall be entitled to recover its reasonable attorneys' fees and all fees, costs and expenses incurred for prosecution, defense, consultation, or advice in such action or proceeding. In addition to the foregoing, the prevailing party shall be entitled to its actual attorneys' fees and all fees, costs and expenses incurred in any post-judgment proceedings to collect or enforce the judgment. This provision is separate and several and shall survive the merger of this Agreement into any judgment on this Agreement.

7. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, representatives, successors and permitted assigns.

8. **Construction: Captions.** The language in all parts of this Agreement shall be in all cases construed simply according to its fair meaning and not strictly for or against any of the parties hereto. The captions in this Agreement are inserted for convenience of reference and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

9. **Modifications: Amendments.** No waiver, modification, amendment, discharge or change of this Agreement shall be valid unless the same is in writing and signed by the party against which the enforcement of such modification, waiver, amendment, discharge or change is sought.

10. **Notices.** All notices or other communications between the parties hereto shall be in writing and personally delivered or sent by certified mail, return receipt requested and prepaid, or sent by overnight courier to the addresses set forth above. A notice shall be effective on the date of personal delivery or courier delivery if personally delivered or delivered by courier, or three days following the date the notice is postmarked if mailed. Either party may change the address to which notices are to be given by giving notice of such change of address in the manner set forth above.

11. **No Joint Venture.** Notwithstanding anything to the contrary contained herein, this Agreement shall not be deemed or construed to make the parties hereto partners or joint venturers, or to render either party liable for any of the debts or obligations of the other.

12. **No Waiver.** No delay on the part of any party hereto in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party hereto of any right, power or privilege hereunder operate as a waiver of any other right, power or privilege hereunder, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder.

13. **Partial Invalidity.** Any provision of this Agreement which is unenforceable or invalid, or the inclusion of which will affect the validity, legality or enforcement of this Agreement, shall be of no effect, but all the remaining provisions of this Agreement shall remain in full force and effect.
14. **Entire Agreement.** This Agreement, together with the other written agreements referred to herein, is intended by the parties to be the final expression of their agreement with respect to the subject matter hereof, and is intended as the complete and exclusive statement of the terms of the agreement between the parties. As such, this Agreement supersedes any prior understandings between the parties, whether oral or written.

15. **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which taken together shall constitute one and the same instrument.

16. **Governing Law.** The validity, meaning and effect of this Agreement shall be determined in accordance with the laws of the State of Arizona.

IN WITNESS WHEREOF, the parties have executed this Agreement effective this 10th day of FEBRUARY, 2007.

BELMONT OWNERSHIP GROUP

GLOBAL WATER RESOURCES, LLC

By: Billy D. Enright

By: Cindy Alleger

Its: Agent

Its: CFO/VP
EXHIBIT A

LEGAL DESCRIPTION

See attached Exhibits A-1 and A-2
EXHIBIT A-1

NORTHWEST CORNER
SOUTHEAST 1/4
SEC. 14, T.2N., R.6W.
FND. IRON PIPE

<table>
<thead>
<tr>
<th>LINE</th>
<th>LENGTH</th>
<th>BEARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>65.00</td>
<td>S00°33'22&quot;W</td>
</tr>
<tr>
<td>L2</td>
<td>1235.00</td>
<td>N00°33'10&quot;E</td>
</tr>
<tr>
<td>L3</td>
<td>1100.00</td>
<td>E89°26'38&quot;E</td>
</tr>
<tr>
<td>L4</td>
<td>1235.00</td>
<td>N00°33'10&quot;E</td>
</tr>
<tr>
<td>L5</td>
<td>1100.00</td>
<td>E89°26'38&quot;E</td>
</tr>
</tbody>
</table>

Parcel 30

P.O.C.
SOUTHEAST CORNER
SEC. 14, T.2N., R.6W.

CAMELBACK ROAD

SOUTHWEST CORNER
SOUTHEAST 1/4
SEC. 14, T.2N., R.6W.

BELMONT
WATER RECLAMATION PROJECT #2
MARICOPA COUNTY, ARIZONA

CMX PROJ. 7237
DATE: Nov. 2006
SCALE: 1" = 400' 
DRAWN BY: BCT
CHECKED BY: SKK

BELMONT 7740 N. 16TH ST. STE. 100
PHOENIX, AZ 85020
PH (602) 567-1900
FAX (602) 567-1901
www.cmxicn.com
### Line Table

<table>
<thead>
<tr>
<th>LINE</th>
<th>LENGTH</th>
<th>BEARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>65.00</td>
<td>S00°32'32&quot;W</td>
</tr>
<tr>
<td>L2</td>
<td>795.90</td>
<td>S89°27'26&quot;E</td>
</tr>
<tr>
<td>L3</td>
<td>589.78</td>
<td>S00°32'32&quot;W</td>
</tr>
<tr>
<td>L4</td>
<td>363.88</td>
<td>S00°32'32&quot;W</td>
</tr>
<tr>
<td>L5</td>
<td>875.90</td>
<td>N89°27'39&quot;W</td>
</tr>
<tr>
<td>L6</td>
<td>1258.44</td>
<td>S00°32'32&quot;W</td>
</tr>
</tbody>
</table>

### Curve Table

<table>
<thead>
<tr>
<th>CURVE</th>
<th>LENGTH</th>
<th>RADIUS</th>
<th>DELTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI</td>
<td>287.69</td>
<td>540.00</td>
<td>3°16'11&quot;</td>
</tr>
</tbody>
</table>

---

**BELMONT WATER RECLAMATION FACILITY**

**MARICOPA COUNTY, ARIZONA**

**WRF PARCEL BOUNDARY**

**CMX PROJ. 7237**

**DATE:** Nov. 2006

**SCALE:** 1" = 400'

**DRAWN BY:** BCT

**CHECKED BY:** SKK

**CREATED BY:** E. M. O., INC.

**WEB SITE:** www.emohc.com
339th Avenue
May 10, 2006

Cindy Liles  
Hassayampa Utility Company  
21410 N. 19th Avenue  
Suite 201 .  
Phoenix, Arizona 85027

Re: Sewer, Water, and Reclaimed Water Service

Cindy,

As we have progressed in our research and development for our project located at 339th Avenue and I-10, it has become readily apparent that your new company Hassayampa Utility Company is the preeminent provider for coordinated water, wastewater, and reclaimed water service for the area. We recognize the necessity for having all three services provided on a regional basis and fully welcome your entrance into this region as a legitimate regional provider.

We also defer back to our other dealings with your company and its surrogates and know that those have been successful in the past. Your presence in the Maricopa Submarket has made a big impact in the overall success in the region.

We, therefore request that we be included in your submittal for the new MAG 208 in the region for this year. We would like to be an integral part of any future plans your company may have in the region.

Thank you,

Michael C. Anderson  
Managing Member 339th & I-10, LLC
November 20, 2006

Ken James, P.E.
Senior Civil Engineer
Maricopa County Environmental Services Department
1001 N. Central Avenue, Suite #150
Phoenix, Arizona 85004

Re: HUC NE 208 Plan Amendment, October 10, 2006
   Campus 2 WRF Site Ownership

Dear Mr. James:

As you know, we are working with Global Water Resources (Global) to finalize the agreement (Agreement) for Hassayampa Utility Company (HUC), its subsidiary, to provide wastewater and reclaimed water service to our 339th Ave Development. For the purposes of the 208 submittal, in advance of this agreement being finalized and on behalf of the 339th and I-10 Development, I want to formally confirm that, subject to the finalization of our agreement, Global/HUC has the right to plan a regional water reclamation facility (WRF), known as the Campus 2 WRF in the Draft HUC NE 208 Amendment application (HUC NE 208), on the approximately 28.7 acre site described in the HUC NE 208, copy attached.

Once the Agreement has been finalized, we will prepare a special warranty deed to transfer the ownership of this site to Global/HUC.

I trust this satisfies your request in the November 17, 2006 Second Review Comments for evidence of Global ownership or legal right to purchase the sites. If you require additional information, please contact me at (480)361-8627.

Sincerely,

Michael C. Anderson
Western Horizons, LLC
Managing Member

Cc: Trevor Hill, Global/HUC
    Robin Bain, Global/HUC
After Recording Return to:
Andrew Abram, Esq.
Burch & Cracchiolo, P.A.
702 East Osborn, #200
Phoenix, AZ 85014

Send tax bills to:
Hassayampa Utility Company, Inc.
21410 North 19th Ave., Ste. 201
Phoenix, AZ 85027

SPECIAL WARRANTY DEED
(Subject to a Condition Subsequent and Negative Pledge)

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, 339th & I-10, LLC, an Arizona limited liability company ("Grantor"), hereby grants, sells and conveys to Hassayampa Utility Company, Inc. ("Grantee"), that real property located in Maricopa County, Arizona and legally described on Exhibit "A" attached hereto and incorporated herein by this reference, together with all interests, privileges and easements appurtenant thereto and any and all improvements located thereon (the "Property").

SUBJECT TO: all taxes and other assessments, reservations in patents, and all easements, rights-of-way, encumbrances, liens, covenants, conditions, reservations, restrictions, obligations, exceptions and liabilities as may appear of record.

Notwithstanding any warranty which may otherwise be implied from the use of any word, phrase or clause herein, Grantor warrants title to the Property, subject to the matters referred to above, only against its own acts, but not the acts of any others.

Notwithstanding the foregoing, title to the Property shall revert to Grantor (which shall be evidenced by a recorded deed in favor of Grantor) if Grantee does not obtain final, unappealable approval of either of the following approvals which establish the authority for the construction and operation of a water reclamation facility on the Property on or before July 1, 2008 (the "Approval Deadline"): (i) Maricopa Association of Government 204 Plan Amendment, or (ii) a Certificate of Convenience and Necessity from the Arizona Corporation Commission.

Grantee covenants not to encumber, lien or grant a security interest in all or any part of the Property at any time on or following the date of this Deed until thirty (30) days following the Approval Deadline. Grantor may elect to waive this covenant by recording an amendment to this Deed.
DATED as of this 9th day of February, 2007

339th & I-10, LLC, an Arizona limited liability company

By: ____________________________

Its: ____________________________

Approved:

Hassayampa Utility Company, Inc.:

An Arizona corporation

By: ____________________________

Its: ____________________________

STATE OF ARIZONA  
County of Maricopa

The foregoing instrument was acknowledged before me this 9th day of February 2007, by Mike Anderson, the manager of 339th & I-10, LLC, an Arizona limited liability company on behalf of said corporation.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Kim Overman
Notary Public

My commission expires: 10/30/09
STATE OF ARIZONA                       )
                                      ) ss.
County of Maricopa                     )

The foregoing instrument was acknowledged before me this 12 day of
February 2009, by Cindy Liles, the CFO & SVP of
Hassayampa Utilities Inc., an Arizona corporation on behalf of said corporation.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

[Signature]
Notary Public

My commission expires:

4/18/2009
EXHIBIT
SOUTHWEST QUARTER, SECTION 8, TOWNSHIP 1 NORTH, RANGE 5 WEST

W 1/4 OF SEC. 8

S89°33'11" E 2335.67'

N89°45'48" W 354.77

N89°45'48" W

S89°30'43" E

LEGAL DES. B

S89°30'43" E

LEGAL DES. A

660.15'

354.86'

1" = 400'
LEGAL DESCRIPTION (A)
NEAR 339TH AVENUE AND I-10

A PORTION OF THE EAST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 1 NORTH, RANGE 5 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 8; THENCE ALONG THE EAST-WEST MID-SECTION LINE OF SAID SECTION 8, SOUTH 89° 33' 11" EAST 2335.67 FEET; THENCE ALONG A LINE PARALLEL TO THE WEST LINE OF SAID EAST HALF OF THE SOUTHWEST QUARTER SOUTH 00° 14' 12" WEST 707.49 FEET TO THE TRUE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 00° 14' 12" WEST 1232.82 FEET TO THE NORTH LINE OF THE SOUTH 701.62 FEET OF EAST HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER;

THENCE ALONG SAID NORTH LINE NORTH 89° 30' 43" WEST 354.86 FEET TO THE WEST LINE OF THE EAST HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER;

THENCE ALONG SAID WEST LINE NORTH 00° 14' 27" EAST 1231.27;

THENCE SOUTH 89° 45' 48" EAST 354.77 FEET TO THE TRUE POINT OF BEGINNING;

SAID PARCEL CONTAINS 437,142 SQUARE FEET OR 10.0354 ACRES MORE OR LESS.
LEGAL DESCRIPTION (B)
NEAR 339TH AVENUE AND I-10

A PORTION OF THE WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 1 NORTH, RANGE 5 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 8; THENCE ALONG THE EAST-WEST MID-SECTION LINE OF SAID SECTION 8, SOUTH 89° 33' 11" EAST 2335.57 FEET; THENCE ALONG A LINE PARALLEL TO THE WEST LINE OF SAID EAST HALF OF THE SOUTHWEST QUARTER SOUTH 00° 14' 12" WEST 707.49 FEET; THENCE NORTH 89° 45' 48" WEST 354.77 FEET TO THE EAST LINE OF SAID WEST HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER AND TO THE TRUE POINT OF BEGINNING:

THENCE ALONG SAID EAST LINE SOUTH 00° 14' 27" WEST 1231.27 FEET TO THE NORTH LINE OF THE SOUTH 701.62 FEET OF SAID WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER;

THENCE ALONG SAID NORTH LINE NORTH 89° 30' 43" WEST 660.15 FEET TO THE WEST LINE OF SAID WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER;

THENCE ALONG SAID WEST LINE NORTH 00° 14' 12" EAST 1228.37 FEET;

THENCE SOUTH 89° 45' 48" EAST 660.23 FEET TO THE TRUE POINT OF BEGINNING:

SAID PARCEL CONTAINS 811,914 SQUARE FEET OR 18.6390 ACRES MORE OR LESS.
Appendix B

HUC and WUGT
Existing and Proposed Sewer and Water
CC&N Boundary Maps
Appendix C

DMA Checklist
May 1, 2007

Julie Hoffman, Environmental Planner III
Maricopa Association of Governments
302 N. 1st Avenue, Suite 300
Phoenix, AZ 85003

Re: MAG Staff Comments Regarding Legal Review of DMA Authorities for Hassayampa Utility Company ("HUC")

Dear Ms. Hoffman:

Thank you for MAG’s April 17, 2007 comments on the Hassayampa Utility Company Northeast 208 Amendment ("HUC Amendment"). This letter is written to address your request for a revision of the November 17, 2006 opinion of our legal counsel, George Tsiolias, "to only discuss how HUC can carry out the functions" of a designated management agency ("DMA") under the Clean Water Act Section 208(c)(2)(A)-(I).

As you are aware, EPA has asked ADEQ to explain "how DMA functions are addressed for [Section 208] Plans for private utilities." See EPA Letter Dated July 20, 2006 (attached hereto). ADEQ in turn has asked Section 208 amendment proponents to provide this explanation by demonstrating their ability to perform the DMA functions. Mr. Tsiolias' legal opinion of November 17, 2006 explains how DMA functions would be addressed under the HUC Amendment, and was provided specifically in response to ADEQ's request per the EPA letter.

It is our understanding that the issue of whether or not a private utility such as HUC may actually constitute a DMA under the existing rules, 40 C.F.R. § 130.2(n) and A.A.C. § R18-5-301(2), is a matter of federal and state law, and thus under the purview of EPA and ADEQ. We are aware that EPA and ADEQ are reviewing a number of demonstrations submitted by private utilities, including one from another Global Water Resources subsidiary. Notwithstanding the possibility that private utilities may, as the result of EPA and ADEQ review of this matter now or in the future, be able to be recognized as the DMA, this demonstration merely addresses HUC's ability to function and does not seek to become a DMA at this time. HUC is willing to accept such designation if/when EPA and ADEQ make this decision regarding private utilities' ability to serve as such. We respectfully
suggest that as long as HUC has demonstrated its ability to function as a DMA, MAG may approve the Amendment.

Sincerely,

GLOBAL WATER RESOURCES, LLC
HASSAYAMPA UTILITY COMPANY, INC

Trevor T. Hill
President and CEO

Attachment (1)

Cc: Dale Bodiya
    Ken James
    Linda Taunt
    Edwina Vogan
    George Tsiolis
    Paul Gilbert
    Christine Close
July 20, 2006

Edwina Vogan, Regional Water Quality Plan Coordinator
Watershed Management Unit
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Dear Ms. Vogan:

I am sending this letter to clarify the status of several recently submitted 208 Plan Amendments (Plans) that do not have a Designated Management Agency (DMA). Two of the six pending Plans: Bachmann Springs and Willow Springs are sponsored by private utilities and do not have DMA’s. These amendments are on hold, as will be any additional Plans we receive for review, until we receive an explanation from your agency regarding how DMA functions are addressed for Plans with private utilities.

As you know, we returned the Palo Verde 208 Plan Amendment last month, in part because it did not include a DMA or explain how DMA functions would be addressed. Sections 208(b)(2)(C)(iii), 208(b)(2)(D) and (c)(1), and regulations in 40 C.F.R. 130.6(c)(5) identify the types of functions performed by DMA’s. Since many Plans are now sponsored by private utilities rather than agencies, they need to explain how DMA functions are addressed.

We look forward to receiving this information for Plans in the State of Arizona and proceeding with our review of these Plans. If you any questions regarding this matter or with a particular Plan, please contact me at 415-972-3415.

Sincerely,

Cheryl A. McGovern
Project Officer
November 17, 2006

ATTORNEY-CLIENT COMMUNICATION (PRIVILEGED)
Sent via E-mail (PDF) and First Class Mail

Robin Bain, P.E., DEE
Permitting Manager
Global Water Management, LLC
21410 North 19th Avenue
Suite 201
Phoenix, Arizona 85027

Re: Designated Management Agency Status of Hassayampa Utility Company
Northeast Service Area

Dear Robin:

This letter expresses my legal opinion concerning the authority of Hassayampa Utility Company ("HUC") to provide wastewater collection and treatment service under the Clean Water Act Section 208(c)(2).

Based on information provided to me by Global Water Management, LLC, it is my opinion that HUC qualifies as a "Designated Management Agency" under A.A.C. R18-5-301(2), with "adequate authority" to perform the functions enumerated at Section 208(c)(2)(A)-(l), 33 U.S.C. § 1288(c)(2)(A)-(l) is the "Northeast Service Area." A memorandum in support of my opinion is attached to this letter.

If you have any questions regarding my opinion or need further information, please let me know at 602-319-4021.

Very truly yours,

[Signature]
George Tsiolis
Attorney at Law
HASSAYAMPA UTILITY COMPANY
NORTHEAST SERVICE AREA
SECTION 208(c)(2)(A)-(I) AUTHORITY

(A) Adequate authority to carry out appropriate portions of the areawide waste treatment management plan.

The DMA's authority to carry out the portions of the Areawide Plan described in the Section 208 Amendment derives in part from the statutes and rules and implementing licenses governing public service corporations ("PSCs").

Article 15, Section 2 of the Arizona Constitution and Arizona Revised Statutes ("A.R.S.") §§ 9-511 and 40-201 through 40-495 confer on PSCs general authority to provide wastewater treatment service in Arizona. The licenses issued to each PSC pursuant to those statutes and corresponding rules provide the framework, or four corners, within which the PSC may provide the service.

The licenses are certificates of convenience and necessity ("CC&N") issued by the Arizona Corporation Commission ("Commission") pursuant to A.R.S. §§ 40-281 through 40-285; and franchises granted by the county, city or town ("Political Subdivision") within which the service will be provided, pursuant to A.R.S. §§ 9-501 and 9-502.

The CC&N: (i) is the Commission's binding confirmation that the PSC has the legal authority to provide the service,¹ (ii) is the Commission's conclusive determination that the PSC has the technical and financial capability to provide the service,² (iii) verifies the particular manner in which the PSC shall generate revenue, including, but not limited to, a schedule of service rates to be assessed against the PSC's customers, the issuance of bonds and other contracts for debt, and the issuance of stock or other forms of equity in the PSC,³ and (iv) confirms the PSC's authority to enforce statutory prohibitions against intentionally or negligently hampering with the PSC's equipment and services.⁴ In this case, the Commission has issued a CC&N to HUC in accordance with the foregoing.⁵

¹ A.R.S. § 40-281 (application for CC&N); A.R.S. § 40-282 (issuance of CC&N).
² Id.; A.R.S. §§ 40-202, 49-321, 40-322 (determination and regulation of technical sufficiency of service); A.R.S. §§ 40-203, 40-362, 40-367 (determination and regulation of financial capability to provide service); see also A.A.C. § R14-2-602(c)-(I), (m) (stating issuance of CC&N is confirmation of institutional, technical, managerial and financial capabilities of PSC).
³ A.R.S. §§ 40-203 (Commission's authority to approve rates), 40-250 (bearing on rates), 40-256 (calculation of rates), 40-301 (issuance of stocks and bonds), 40-302 (other debt instruments), 40-303 (forms of evidence of equity issuance and indebtedness), 40-335 (rate remissions), 40-361 (manner of rate assessment), 40-362 (periodic investigation of rates), 40-365 (routine filing of rate schedule), 40-367 (rate changes), 40-368 (sliding scale of rates).
⁴ A.R.S. §§ 40-492 (civil action for tampering with utility), 40-493 (damages, costs and attorney fees), 40-494 (presumptive violations); see also A.A.C. § R14-2-609(B)(1)(a) (authorizing PCs to terminate treatment service to any customer without advance notice upon the PSC's determination that the customer's wastewater discharge is hazardous to the sewage collection or treatment system); A.A.C. § R14-2-609(C)(1)(c) (allowing termination of service for customer's breach of contract).
⁵ CC&N Decision No. 68922 (August 29, 2006) at 3 (finding HUC's plant has "adequate treatment capacity" to provide service); id. at 3, 4, 9 (authorizing HUC to file and impose a pretreatment tariff to ensure if a customer "discharges
The franchise: (i) is the Political Subdivision’s binding confirmation that the PSC has the legal authority to utilize public rights of way to install and maintain sewage collection and processing systems; (ii) verifies and imposes conditions on the manner in which the rights of way shall be utilized; and (iii) confirms the PSC’s authority to use statutory and county or municipal ordinances to protect the integrity of the sewage collection and processing systems against the intentional or negligent misconduct of third parties. In this case, HUC is in the process of receiving from Maricopa County a franchise in accordance with the foregoing, in furtherance of HUC’s service in the area covered by the Section 208 Amendment. A Board of Supervisors’ vote confirming the franchise is to occur on December 20, 2006.

The DMA’s authority to carry out the portions of the Areawide Plan described in the Section 208 Amendment also derives from the planning statutes governing utility providers and implementing agreements. A.R.S. §§ 11-825 and 11-830 confer on Arizona counties the obligation to conduct long-range planning of sewage collection and treatment within their unincorporated jurisdictions. Maricopa County has elected to satisfy that obligation in part by agreeing to sponsor the Section 208 Amendment, thus incorporating HUC’s service under the Amendment within the County’s plan. Correspondingly, HUC has agreements with the development subdivisions in the area covered by the Amendment, under which HUC is authorized to provide service specifically to those subdivisions.

The foregoing statutes, rules, licenses and agreements provide HUC with adequate authority to carry out the portions of the Areawide Plan described in the Section 208 Amendment, as required under the Clean Water Act § 208(c)(2), 33 U.S.C. § 1288(c)(2).

(B) Adequate authority to manage effectively waste treatment works and related facilities serving the area in conformance with the areawide plan.

The DMA’s “authority to manage effectively” waste treatment works and related facilities serving the area covered by the Section 208 Amendment derives from the same statutes, rules, licenses

something into the sewer that causes a permit violation or fails to maintain permit compliance, [HUC] could shut that customer down"); id. at 5, 9 (discussing HUC’s projected equity and rate-based revenue sources); id. at 6-7, 8 (finding “reasonable and appropriate” HUC’s schedule of rates charged to customers for service, as amended by Commission staff); id. at 9 (authorizing HUC to “collect from its customers a proportionate share of any privilege, sales or use tax pursuant to A.A.C. R14-2-409(D)(5)); id. at 7 (concluding HUC is a “fit and proper entity” to provide the service); see also Docket No. SW-20422A-06 Application (September 7, 2006) (specifying HUC’s legal, technical and financial capability to provide the service). Attached hereto as Exhibits 1 and 2.


7 A.R.S. § 11-825(C)(2) (requiring plan to identify distribution, location, extent and intensity of major components of sewage disposal, drainage and other facilities necessary to provide for the land uses described in the plan; A.R.S. § 11-830(G) (discussion obligations of sewage treatment provider within plan).

8 See, e.g., Correspondence from Maricopa County regarding Sponsorship of Amendment, attached hereto as Exhibit 3.

9 See Subdivision Request-for-Service letters, attached hereto as Exhibit 4.

and agreements discussed above. For instance, the DMA would not have authority to manage effectively the waste treatment works if the only franchise it can secure is one that requires one hundred lift stations to route wastewater to the plant. Such a right of way configuration, while authorized by the franchise, would not lend itself to effective management of the system.

The DMA’s ability to manage the sewage collection and treatment system effectively, on the other hand, is indicated by A.R.S. §§ 40-201 through 40-495 and the CC&N issued thereunder, and by the engineering and other technical specifications in the Section 208 Amendment. HUC, accordingly, has adequate authority to manage effectively the waste treatment works and related facilities that would serve the area covered by the Section 208 Amendment, as well as the ability to do so.

(C) **Adequate authority directly or by contract, to design and construct new works, and to operate and maintain new and existing works as required by the areawide plan.**

The DMA’s authority to design, construct, operate and maintain sewage collection and treatment works required for the area covered by the Section 208 Amendment derives from the same statutes, rules, licenses and agreements discussed above. The CC&N, Maricopa County franchise, County plan including sponsorship of the Amendment, and subdivision agreements, discussed above, provide the authority in the first instance to construct and operate the works, and form the basis pursuant to which the balance of the permits necessary to regulate such operations, such as aquifer protection and special use permits, can be issued.

The DMA’s authority to contract with engineering firms and other contractors and vendors, to the extent necessary to design, construct, operate and maintain the collection and treatment system, is grounded in corporation law. That law recognizes an entity duly incorporated with the Commission has the right to enter into binding service contracts to further the stated goals of the entity’s articles of incorporation and bylaws. Accordingly, HUC has adequate authority directly or by contract to design, construct, operate and maintain the sewage collection and treatment works that would serve the area covered by the Section 208 Amendment.

---

11 A.R.S. §§ 40-202, 40-321, 40-322 (determination and regulation of technical sufficiency of service); A.A.C. § R14-2-602(c) (requiring information about the type of facility to be constructed); A.A.C. § R14-2-602(d) (requiring engineering specifications “in sufficient detail to properly describe the principal systems and components”).

12 CC&N Decision No. 68922 at 3 (finding HUC’s plant has “adequate treatment capacity” to provide service); *id.* at 3, 4, 9 (authorizing HUC to cancel service to customers that fail to pretreat their indirect discharges or otherwise cause a violation of HUC’s permit); *id.* at 7 (concluding HUC is a “fit and proper entity” to provide the service); Docket No. SW-20422A-06 Application (specifying HUC’s technical capability to provide the service).

13 See Section 208 Amendment Application § 6 (design of existing and proposed treatment systems), § 7 (plan for deployment of reclaimed water), § 8 (sewage treatment and collection system permitting plan); § 9 (phasing of expanded treatment capacity).

14 A.R.S. § 10-302 ("Unless its articles of incorporation provide otherwise, every corporation has perpetual duration and succession in its corporate name and has the same powers as an individual to do all things necessary or convenient to carry out its business and affairs, including power to: . . . 7. Make contracts and guarantees, incur liabilities . . ..")
(D) **Adequate authority to accept and utilize grants, or other funds from any source, for waste treatment management purposes.**

PSCs are, like any corporation registered with the Commission, authorized to generate, secure, accept and utilize funds from a variety of sources.\(^{15}\) Additionally, A.R.S. §§ 40-201 through 40-495 provide PSC's specific authority to generate, secure, accept and utilize funds through a schedule of service rates to be assessed against the PSC's customers, the issuance of bonds and other contracts for debt, and the issuance of stock or other forms of equity in the PSC.\(^{16}\) The CC&N issued pursuant to those statutes defines how that authority may be applied in the given service area.\(^{17}\) Accordingly, HUC has adequate authority to accept and utilize funds from a variety of sources for waste treatment management purposes.

(E) **Adequate authority to raise revenue including the assessment of waste treatment charges.**

The DMA's authority to raise revenue generally is found in the statutes that authorize any corporation registered with the Commission to generate, secure, accept and utilize funds.\(^{18}\)

The authority to assess waste treatment charges, in particular, derives from A.R.S. §§ 40-201 through 40-495, which provide PSCs authority to generate, secure, accept and utilize funds through a schedule of service rates to be assessed against the PSC's customers.\(^{19}\) The CC&N issued pursuant to those statutes defines how that authority may be applied in the given service area.\(^{20}\) Accordingly, HUC has adequate authority to raise revenue including the assessment of waste treatment charges.

(F) **Adequate authority to incur short- and long-term indebtedness.**

The DMA's authority to incur debt is found in the statutes that authorize any corporation registered with the Commission to enter contracts to borrow money.\(^{21}\)

---

\(^{15}\) A.R.S. § 10-302 ("... every corporation has ... power to: ... 7 ... borrow monies, issue its notes, bonds and other obligations, which may be convertible into or include the option to purchase other securities of the corporation, and secure any of its obligations by mortgage, deed of trust, security agreement, pledge or other encumbrance of any of its property, franchises or income. 8. Issue any bond, debenture or debt security of the corporation.").

\(^{16}\) See Footnote 3; see also A.A.C. § R14-2-602(e) (rates to be charged for service rendered); A.A.C. § R14-2-602(g) (manner of capitalization and method of financing for the project).

\(^{17}\) See CC&N Decision No. 68922 at 3, 4, 9 (authorizing HUC to file and impose a pretreatment tariff); id. at 5, 9 (discussing HUC's projected equity and rate-based revenue sources); id. at 6-7, 8 (finding "reasonable and appropriate" HUC's schedule of rates charged to customers for service, as amended by Commission staff); id. at 9 (authorizing HUC to "collect from its customers a proportionate share of any privilege, sales or use tax pursuant to A.A.C. R14-2-409(D)(5)); id. at 7; see also Docket No. SW-20422A-06 (specifying HUC's financial capability to provide the service).

\(^{18}\) See Footnote 15.

\(^{19}\) A.R.S. §§ 40-203 (Commission's authority to approve rates), 40-250 (hearing on rates), 40-256 (calculation of rates), 40-361 (manner of rate assessment), 40-365 (routine filing of rate schedule), 40-367 (rate changes); see also A.A.C. § R14-2-602(e) (rates to be charged for service rendered).

\(^{20}\) See Footnote 17.

\(^{21}\) See Footnote 15.
In addition, A.R.S. §§ 40-201 through 40-495 provide PSC’s specific authority to issue bonds and equity and enter other contracts for debt. Accordingly, HUC has the authority to incur short- and long-term indebtedness.

\(G\) **Adequate authority to assure in implementation of an areawide waste treatment management plan that each participating community pays its proportionate share of treatment costs.**

The DMA’s authority to assure each community that is being provided the service pays its proportionate share of treatment costs derives from A.R.S. §§ 40-201 through 40-495. Those statutes confer on DMAs that are PSCs the authority to pass on the treatment costs to their customers by charging them certain rates. It is the central purpose of the CC&N that are issued pursuant to those statutes to make sure the ratemaking is proportionately fair and equitable. Accordingly, HUC has adequate authority to assure each community receiving the service pays its proportionate share of treatment costs.

\(H\) **Adequate authority to refuse to receive any wastes from any municipality or subdivision thereof, which does not comply with any provisions of the areawide plan.**

The DMA’s authority to refuse to receive wastewater which does not comply with provisions of the Areawide Plan is grounded, firstly, in A.A.C. § R14-2-609(B)(1)(a), which provides “[u]tility service may be disconnected without advance written notice” due to the “existence of an obvious hazard to the safety or health of the consumer or the general population.” When a customer’s wastewater that does not comply with provisions of the Areawide Plan has the potential to result or in fact results in a wastewater treatment system upset or bypass, the potential or actual result is an obvious hazard to the general population. In such instances, A.A.C. § R14-2-609(B)(1)(a) authorizes the DMA to discontinue further service to the customer. This authority is reflected in the CC&N, which allows a pretreatment tariff to be filed and imposed to ensure if a customer “discharges something into the sewer that causes a permit violation or fails to maintain compliance, [HUC] could shut that customer down.”

---

22 A.R.S. §§ 40-301 (issuance of stocks and bonds), 40-302 (other debt instruments), 40-303 (forms of evidence of equity issuance and indebtedness); see also A.A.C. § R14-2-602(g) (manner of capitalization and methods of financing).

23 See Footnote 19.

24 See, e.g., Decision No. 68922 at 9 (authorizing HUC to “collect from its customers a proportionate share of any privilege, sales or use tax pursuant to A.A.C. R14-2-409(D)(5)).


26 Decision No. 68922 at 3-4.
The Commission’s rules, additionally, require compliance with the Clean Water Act as a condition of issuance and maintenance of CC&N. Therefore, to the extent receipt of wastewater would result in a violation of Clean Water Act Section 208 and areawide plans and amendments adopted pursuant thereto, the DMA would be required to refuse to receive the wastewater.

Finally, A.A.C. § R14-2-609(C)(1)(e) allows termination of service for the customer’s breach of contract. HUC’s form line extension agreement, discussed below, requires its customers to abide by material provisions of the Clean Water Act and implementing rules as a condition of receiving service. Therefore, if a customer violates those provisions, HUC has authority terminate the customer’s service.

HUC, accordingly, has adequate authority to refuse to receive wastewater which does not comply with provisions of the Areawide Plan.

(I) Adequate authority to accept for treatment industrial wastes.

A.R.S. §§ 40-201 through 40-495 and the CC&N issued thereunder provide the DMA the authority to receive industrial wastewater just like any other form of wastewater. Neither the statutes nor the rules discriminate against industrial wastewater per se.

In connection with its receipt of industrial wastewater, HUC has authority to impose Categorical and other Pretreatment Standards against those customers that are Industrial Users under A.A.C. § R18-9-A906(D) and 40 C.F.R. Part 403. HUC has this authority for two reasons.

First, HUC is a “POTW” for purposes of the pretreatment statutes and rules. Under the Section 208 Amendment, HUC would be the “designated management agency” under A.A.C. § R18-5-301(2), which qualifies as a “municipality” under 33 U.S.C. § 1362(4), which qualifies as a “POTW” under 40 C.F.R. § 403.4(q) and A.R.S. § 49-255(5). A.A.C. § R18-9-A906(D) and 40 C.F.R. Part 403 thus confer on HUC regulatory authority to enforce the Pretreatment Standards.

Second, HUC has in its form line extension agreement a provision that imposes on customers that are Industrial Users the contractual obligation to satisfy the Pretreatment Standards; confers on HUC the right to terminate service in the event of a customer’s violation of the Pretreatment Standards,” and imposes on customers the obligation to indemnify, hold harmless and defend HUC for any losses arising from their violation of the Pretreatment Standards. Thus, the line extension agreements confer on HUC an alternative, contractual authority to enforce the Pretreatment Standards.

---

27 See, e.g., Decision No. 68922 at 8-9 (indicating failure to achieve compliance with § 208, Arizona Pollutant Discharge Elimination System laws, and Arizona Aquifer Protection Program laws by specific dates would render CC&N void).

28 See also A.R.S. §§ 40-492 (civil action for tampering with utility) and 40-493 (damages, costs and attorney fees).

29 Compare A.A.C. § R14-2-609(B)(1)(a) (authorizing termination of service upon determination customer’s wastewater is causing a hazard).

30 Form Line Extension Agreement ¶ 10, attached hereto as Exhibit 5. (HUC’s codes of practice in furtherance of the Pretreatment Standards are included with the Section 208 Amendment.)
LIST OF EXHIBITS (Attached)

1 – CC&N Decision No. 68922 (August 29, 2006)

2 – Docket No. SW-20422A-06 Application (September 7, 2006)

3 – Correspondence with Maricopa County re Sponsorship of Section 208 Amendment

4 – Subdivision Request-for-Service Letters

5 – Form Line Extension Agreement
Appendix D

Legal Description with Exhibit for Campus 1, 2, 3, and 4 Sites
Campus 1 WRF Site
PARCEL DESCRIPTION
Hassayampa Ranch
Proposed Water Reclamation Facility Site

That part of the southwest quarter of the southeast quarter of Section 22, Township 2 North, Range 5 West, of the Gila and Salt River Meridian, Maricopa County, Arizona, more particularly described as follows:

Commencing at the northwest corner of said southwest quarter of the southeast quarter;

Thence S89°41'17"E, along the North line of said southwest quarter of the southeast quarter, a distance of 28.00 feet, to a point on a line parallel with and 28.00 feet East of the North-South mid-section line of said Section;

Thence, leaving said North line, S00°07'03"W, along said parallel line, a distance of 440.00 feet, to the PRIMARY POINT OF BEGINNING;

Thence, leaving said parallel line, S89°41'17"E, a distance of 1,000.00 feet;

Thence S00°07'03"W, a distance of 860.00 feet;

Thence N89°41'17"W, a distance of 1,000.00 feet, to a point on said parallel line;

Thence N00°07'03"E, along said parallel line, a distance of 860.00 feet, to the PRIMARY POINT OF BEGINNING.

Described parcel containing 859,989 square feet or 19.7426 acres, more or less.

See attached Exhibit "A".
EXHIBIT "A"

HASSAYAMPA RANCH
PROPOSED WATER RECLAMATION FACILITY
AND OPTION PARCEL SITES

PROJ. NO. 4056438.00
DATE: 10/11/05
BY: RCH
SCALE: 1=300'
PAGE: 2 OF 2
PARCEL DESCRIPTION
Hassayampa Ranch
Proposed Option Parcel

That part of the southwest quarter of the southeast quarter of Section 22,
Township 2 North, Range 5 West, of the Gila and Salt River Meridian,
Maricopa County, Arizona, more particularly described as follows:

Commencing at the northwest corner of said southwest quarter of the
southeast quarter;

Thence S89°41'17"E, along the North line of said southwest quarter of the
southeast quarter, a distance of 28.00 feet, to a point on a line parallel with and
28.00 feet East of the North-South mid-section line of said Section, said point
being the SECONDARY POINT OF BEGINNING;

Thence, continuing along said North line, S89°41'17"E, a distance of 1,000.00
feet;

Thence, leaving said North line, S00°07'03"W, a distance of 440.00 feet;

Thence N89°41'17"W, a distance of 1,000.00 feet, to a point on said parallel
line;

Thence N00°07'03"E, along said parallel line, a distance of 440.00 feet, to the
SECONDARY POINT OF BEGINNING;

Described parcel containing 439,998 square feet or 10.1010 acres, more or
less.

See attached Exhibit "A".

10/11/2005
M:\data\HARVARD2000\Word\Option Parcel.doc Page 1 of 2
*The APS Substation, approximately 1.6 acres, will be owned by HUC and used by APS under an easement agreement. Thus, HUC will own the entire setback area.
Campus 2 WRF Site
EXHIBIT
SOUTHWEST QUARTER, SECTION 8,
TOWNSHIP 1 NORTH, RANGE 5 WEST

W 1/4 OF SEC. 8

S89°33'11"E 2335.67'

N89°45'48"W 354.77

N89°30'43"E 660.23'

S89°30'43"E 660.15'

1"=400'
LEGAL DESCRIPTION (A)
NEAR 339TH AVENUE AND I-10

A PORTION OF THE EAST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 1 NORTH, RANGE 5 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 8; THENCE ALONG THE EAST-WEST MID-SECTION LINE OF SAID SECTION 8, SOUTH 89° 33' 11" EAST 2335.87 FEET; THENCE ALONG A LINE PARALLEL TO THE WEST LINE OF SAID EAST HALF OF THE SOUTHWEST QUARTER SOUTH 00° 14' 12" WEST 707.49 FEET TO THE TRUE POINT OF BEGINNING:

THENCE CONTINUING SOUTH 00° 14' 12" WEST 1232.82 FEET TO THE NORTH LINE OF THE SOUTH 701.62 FEET OF EAST HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER;

THENCE ALONG SAID NORTH LINE NORTH 89° 30' 43" WEST 354.86 FEET TO THE WEST LINE OF THE EAST HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER;

THENCE ALONG SAID WEST LINE NORTH 00° 14' 27" EAST 1231.27;

THENCE SOUTH 89° 45' 48" EAST 354.77 FEET TO THE TRUE POINT OF BEGINNING:

SAID PARCEL CONTAINS 437,142 SQUARE FEET OR 10.0354 ACRES MORE OR LESS.

0447.4LD1
LEGAL DESCRIPTION (B)
NEAR 339TH AVENUE AND I-10

A PORTION OF THE WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 1 NORTH, RANGE 5 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 8; THENCE ALONG THE EAST-WEST MID-SECTION LINE OF SAID SECTION 8, SOUTH 89° 33' 11" EAST 2335.67 FEET; THENCE ALONG A LINE PARALLEL TO THE WEST LINE OF SAID EAST HALF OF THE SOUTHWEST QUARTER SOUTH 00° 14' 12" WEST 707.49 FEET; THENCE NORTH 89° 45' 48" WEST 354.77 FEET TO THE EAST LINE OF SAID WEST HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER AND TO THE TRUE POINT OF BEGINNING:

THENCE ALONG SAID EAST LINE SOUTH 00°14' 27" WEST 1231.27 FEET TO THE NORTH LINE OF THE SOUTH 701.62 FEET OF SAID WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER;

THENCE ALONG SAID NORTH LINE NORTH 89° 30' 43" WEST 660.15 FEET TO THE WEST LINE OF SAID WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER;

THENCE ALONG SAID WEST LINE NORTH 00° 14' 12" EAST 1228.37 FEET;

THENCE SOUTH 89° 45' 48" EAST 660.23 FEET TO THE TRUE POINT OF BEGINNING:

SAID PARCEL CONTAINS 811,914 SQUARE FEET OR 18.6390 ACRES MORE OR LESS.

0447.41D2
Campus 3 WRF Site
EXHIBIT “A”
WATER RECLAMATION FACILITY #3
BELMONT
LEGAL DESCRIPTION

That portion of the Southwest Quarter of Section 30, Township 2 North, Range 5 West of the Gila and Salt River Meridian, Maricopa County, Arizona, more particularly described as follows:

COMMENCING at a found brass cap in a hand hole accepted as the southwest corner of said section, from which a found brass cap accepted as the south quarter corner of said section bears South 89 degrees 27 minutes 28 seconds East (accepted as the centerline of Thomas Road), a distance of 2479.29 feet;

Thence along the south line of said Southwest quarter, South 89 degrees 27 minutes 28 seconds East a distance of 658.76 feet;

Thence leaving along said south line, North 00 degrees 32 minutes 32 seconds East, a distance of 65.00 feet to the proposed northerly right of way line of Thomas Road and the POINT OF BEGINNING;

Thence North 17 degrees 14 minutes 14 seconds East, a distance of 35.93 feet;
Thence North 30 degrees 00 minutes 12 seconds East, a distance of 62.26 feet;
Thence North 19 degrees 50 minutes 59 seconds West, a distance of 72.78 feet;
Thence North 11 degrees 25 minutes 47 seconds West, a distance of 65.74 feet;
Thence North 10 degrees 27 minutes 09 seconds West, a distance of 43.26 feet;
Thence North 30 degrees 28 minutes 21 seconds West, a distance of 67.56 feet;
Thence North 06 degrees 30 minutes 50 seconds East, a distance of 47.86 feet;
Thence North 03 degrees 12 minutes 37 seconds West, a distance of 61.56 feet;
Thence North 07 degrees 28 minutes 20 seconds East, a distance of 86.61 feet;
Thence North 13 degrees 25 minutes 05 seconds West, a distance of 85.06 feet;
Thence North 30 degrees 10 minutes 45 seconds West, a distance of 93.91 feet;
Thence North 04 degrees 57 minutes 26 seconds West, a distance of 77.55 feet;
Thence North 07 degrees 44 minutes 53 seconds East, a distance of 62.64 feet;
Thence North 26 degrees 06 minutes 33 seconds East, a distance of 137.98 feet;
Thence North 35 degrees 23 minutes 08 seconds East, a distance of 81.38 feet;
Thence North 07 degrees 12 minutes 16 seconds West, a distance of 82.48 feet;

Thence North 11 degrees 51 minutes 58 seconds East, a distance of 68.21 feet;

Thence North 03 degrees 34 minutes 27 seconds East, a distance of 49.78 feet;

Thence North 10 degrees 57 minutes 32 seconds West, a distance of 48.87 feet to the north line of the south half of said Southwest quarter;

Thence along said north line, South 89 degrees 27 minutes 39 seconds East, a distance of 1033.65 feet;

Thence leaving said north line, South 00 degrees 32 minutes 32 seconds West, a distance of 383.86 feet to a non-tangent curve, concave southeasterly, having a radius of 540.00 feet, the center of which bears South 57 degrees 52 minutes 17 seconds East;

Thence southwesterly along said curve, through a central angle of 31 degrees 35 minutes 11 seconds, an arc length of 297.69 feet to a point of tangency;

Thence South 00 degrees 32 minutes 32 seconds West, a distance of 589.78 feet to the north line of the south 65.90 feet of said Southwest quarter and said proposed line;

Thence along the last said north line, North 89 degrees 27 minutes 28 seconds West, a distance of 957.11 feet to the POINT OF BEGINNING.

The described area contains 1,276,661 square feet (29.3081 acres) more or less.

The description shown hereon is not to be used to violate any subdivision regulation of the state, county and/or municipality or any other land division restrictions.

Prepared by: CMX L.L.C.
7740 N. 16th Street, Suite 100
Phoenix, AZ 85020
Project No. 7237
November 8, 2006

[Signature]
Campus 4 WRF Site
EXHIBIT "A"
WATER RECLAMATION FACILITY #4
BELMONT
LEGAL DESCRIPTION

That portion of the Southeast Quarter of Section 14, Township 2 North, Range 6 West of the Gila and Salt River Meridian, Maricopa County, Arizona, more particularly described as follows:

COMMENCING at a found rebar accepted as the southwest corner of said Southeast quarter from which a found GLO brass cap accepted as the southeast corner of said Southeast Quarter bears South 89 degrees 26 minutes 38 seconds East (accepted as the centerline of Camelback Road), a distance of 2639.37 feet;

Thence along the west line of said Southeast quarter, North 00 degrees 33 minutes 10 seconds East a distance of 65.00 feet to the northerly line of the south 65.00 feet of said Southeast quarter and the POINT OF Beginning;

Thence along said west line, North 00 degrees 33 minutes 10 seconds East, a distance of 1235.00 feet to the north line of the south 1300.00 feet of said Southeast quarter;

Thence along said north line, South 89 degrees 26 minutes 38 seconds West, a distance of 1100.00 feet to the east line of the west 1100.00 feet of said Southeast quarter;

Thence along said east line, South 00 degrees 33 minutes 10 seconds West, a distance of 1235.00 feet to the proposed northerly right of way line of Camelback Road being 65.00 feet northerly of and parallel with the southerly line of said Southeast quarter;

Thence along said proposed northerly line, South 89 degrees 26 minutes 38 seconds East a distance of 1100.00 feet to the POINT OF BEGINNING.

The above described area contains 1,358,500 square feet (31.1868 acres) more or less.

The description shown hereon is not to be used to violate any subdivision regulation of the state, county and/or municipality or any other land division restrictions.

This description was not based upon a land survey by CMX, L.L.C.

Prepared by: CMX L.L.C.
7740 N. 16th Street, Suite 100
Phoenix, AZ 85020
Project No. 7237
November 2, 2006
THE AREA IS 1,358,500 SQ. FT. OR 31.1868 ACRES
Appendix E

Regulations for Individual Sewage Systems and Septic Systems
GLOBAL WATER RESOURCES, L.L.C.
WASTEWATER SYSTEM STANDARDS

I. GENERAL REQUIREMENTS

A. Introduction

This document has been developed as a guideline to provide minimum criteria for the planning, design, and construction of wastewater collection and pumping systems. It is the responsibility of the developer/engineer to comply with the requirements of the Arizona Department of Environmental Quality (ADEQ) in Title 18 of the Arizona Administrative Code (AAC), and the standards issued by an authority having jurisdiction. In the event of a conflict between the Global Water Resources (GWR) design guidelines discussed herein and any applicable federal, state, county, or local authority, the more stringent requirement shall take precedence.

Technical specifications and standard details shall conform to the current Uniform Standard Specifications for Public Works Construction sponsored and distributed by the Maricopa Association of Governments (MAG), any GWR supplements thereto, and as modified herein.

B. Codes of Practice

All development must be in compliance with current GWR Codes of Practice, which are provided in Appendix A.

C. Submittal Requirements

All improvement projects which involve the GWR sanitary sewer collection system must be submitted for GWR review and approval prior to construction. Submittals shall be made in accordance with the policies and procedures established by the local governing authority in which the system is to be constructed. Refer to Appendix D for additional information regarding the process for request and approval of service.

1. Master Plans

A Wastewater Master Plan is required for all proposed developments. Development master plans shall be prepared in accordance with GWR design guidelines and must conform to GWR Master Wastewater Plan for the region. A minimum of 3 copies shall be submitted to GWR prior to final plan submittal. AutoCAD files shall be submitted on a CDR disk with the master plan.
At a minimum, master plans shall include the following:

- A brief description of the project location, site conditions, topographic conditions (on an approved vertical datum), and existing and proposed land use.
- A vicinity map and proposed land use plan.
- A description of the wastewater system design criteria utilized.
- A map which identifies the proposed wastewater infrastructure and the wastewater service area with contour data, both existing and proposed.
- Anticipated wastewater flows generated within the development.
- A description of the existing and proposed wastewater system.
- A description and timeline of project phasing.
- A spreadsheet which summarizes the upstream and downstream nodes, service acreage, number of dwelling units served, average and peak flows, lengths, slopes, inverts, diameters, ground elevations, pipe capacity, percentage of pipe capacity utilized, and peak daily flow velocity for each sewer segment.

All master plans shall be signed and sealed by a professional civil engineer registered in the State of Arizona.

2. Construction Drawings

Gravity sewer plans shall be at a minimum scale of 1" = 40' and shall include the following information:

- Sewer stationing.
- Signature approval block for the appropriate wastewater utility provider.
- Benchmark and datum information.
- Plan and profile views for water mains 6 inches and larger.
- GWR standard sewer notes (located in Appendix B).
- Existing and proposed ground elevations at the centerline of the sewer.
- Locations of sewer service lines.
- Slope, length, and invert elevation of stubs for future extensions.
- Identification of pipe crossings and proposed separations.
- Identification of existing utility locations.
- Identification and dimensions of easements and right-of-ways.

All plan documents shall be signed and sealed by a professional civil engineer registered in the State of Arizona.

3. Design Reports

A design report may be required at the discretion of GWR depending on the scale of the project. A report shall be required for all proposed lift station projects.
Reports shall be signed and sealed by a professional civil engineer registered in the State of Arizona.

D. Meeting Requirements

Mandatory meetings shall include the following:

- A pre-design meeting between the developer, engineer, GWR, and the local governing authority.
- An onsite pre-construction meeting between the contractor, the GWR inspector, and the local governing authority.

The contractor must present to GWR all applicable permits prior to or during the pre-construction meeting including, but not limited to, all ADEQ permits and any permits required by the local governing authority.

It shall be responsibility of the developer, engineer, and/or contractor to schedule the pre-design and pre-construction meetings.

Refer to Appendix D for additional information related to meeting requirements.

E. Final Acceptance

Final acceptance of gravity sewers, force mains, and manholes shall be in accordance with GWR Code of Practice GWR-CP-01-008 Acceptance of Underground Facilities.

No new utilities will be accepted by GWR until the following occurs:

- All installed facilities have been inspected, tested, and approved.
- A video survey has been completed after paving operations and shall include video of all sewer infrastructure.
- A copy of all test reports, including trench compaction tests, and inspections has been provided to GWR.
- All punchlist items required by the GWR inspector have been addressed.
- Record drawings (as-buils) have been supplied to GWR by the Engineer-of-Record including AutoCAD files.
- A signed ADEQ “Certificate of Approval of Construction” has been provided to GWR.
- Developer has furnished copies of the contract, copies of all checks paid to the Contractor, and UNCONDITIONAL LIEN WAIVERS from the Contractor.
- Any other outstanding issues.

Water meters will NOT be installed to any water service location until the sewer system is accepted by GWR, all easements have been signed and recorded, and the video, mainline and services, approved.
Record drawings (as-builts) to be provided to GWR shall consist of three 11” x 17” hard copy sets of as-built drawings and one electronic set on CDR disk in AutoCAD format with a minimum of two points referenced to the GWR GIS system.

II. SEWER COLLECTION SYSTEMS

A. Sanitary Sewers

In general, all sewer lines in subdivisions shall be located 6 feet south or west of street centerlines. Horizontal curvilinear sewers shall not be allowed for sewers less than 24 inches in diameter. For sewers greater than 24 inches, contact GWR.

All sewers with services shall be installed with a minimum cover of seven (7) feet above the top of pipe to finished grade unless otherwise approved by GWR. The depth shall be sufficient to allow for gravity drainage from the ultimate service area as well as allow for future extensions to adjacent service areas when necessary. The depth of the main sewer line and the side (house) sewers shall be sufficient to avoid conflicts with water service connections and dry utilities.

Acceptable pipe materials for gravity sanitary sewer lines shall include the following:

- Sewers 15 inches in diameter and smaller shall be polyvinyl chloride (PVC) or ductile iron (DIP).
- Sewers larger than 15 inches in diameter shall be PVC, DIP, high density polyethylene (HDPE), or fiberglass reinforced polymer mortar (FRPM).
- All building and house service connections shall be PVC, minimum 4 inches in diameter.

Proposals for alternate pipe materials may be considered by GWR and shall be submitted, in writing, by the engineer.

DIP shall include an approved polyurethane or ceramic epoxy interior lining system with a minimum thickness of 40 mils. Each section of pipe and fitting shall be Holiday tested. Encasement of DIP with a loose type of polyethylene material per MAG standards may be required for corrosive soil environments at the discretion of GWR.

In areas where depth exceeds the allowable capacity of PVC and HDPE pipe, a non-flexible pipe material such as DIP shall be utilized at the discretion of GWR.

Buoyancy and the potential for flotation of sewers shall be considered and prevented with appropriate construction where high groundwater levels are anticipated.

B. Manholes

Manholes shall be installed at the end of each line and at all changes in pipe grade, size, material, and alignment. At changes in pipe alignment, the horizontal angle between two
intersecting sewer lines shall not be less than 90 degrees. Manholes shall also be used in lieu of a wye fitting for service connections 8 inches in diameter and larger.

Maximum sewer lengths between manholes shall be as follows:

<table>
<thead>
<tr>
<th>Pipe Diameter (In)</th>
<th>Maximum Spacing (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12</td>
<td>400</td>
</tr>
<tr>
<td>12 to 15</td>
<td>500</td>
</tr>
<tr>
<td>18 to 36</td>
<td>600</td>
</tr>
<tr>
<td>Over 36</td>
<td>800</td>
</tr>
</tbody>
</table>

Cleanouts may be utilized in place of manholes at dead ends when the sewer length is less than 150 feet. Either a manhole or cleanout shall be provided at the end of all line extensions to allow for cleaning. Cleanouts or manholes shall also be provided at the end of all sewer line stubs for future extensions which are greater than one pipe length to allow for testing.

Manholes shall be precast concrete structures in accordance with MAG standards with the exception that manhole steps shall not be provided. Minimum manhole diameters shall be 48 inches for pipe diameters of 8 to 15 inches. Manhole diameters shall be 60 inches for pipe diameters greater than 15 inches or for manholes greater than 10 feet in depth measured from the flow line to the manhole rim. The minimum manhole frame and cover diameter shall be 30 inches for 60 inch manholes.

An approved interior manhole coating system for corrosion protection shall be required for manholes with sewers 15 inches and larger. System shall be approved by GWR prior to installation. T-Loe systems are not acceptable.

Manholes located in washes shall be constructed in accordance with Standard Detail No. 3. The top of sewer pipe located within washes shall be located a minimum of two feet below the scour depth.

C. Design Flows

All sewers shall be designed for peak flow conditions. In the absence of flow data, new domestic sewage systems shall be designed based on the following criteria:

- Residential flows shall be based upon 234 gpd per dwelling unit and a dry peaking factor based upon tributary population in accordance with Table 1 of AAC R-18-9-E301.D.1.a.
- Commercial average day flows shall be based on 0.10 gallons per square foot of building area. For master planning purposes, it shall be assumed that the building area occupies 50% of the total commercial land area to account for open space and parking. Accordingly, the average day flow shall be equal to 2,200 gpd per acre of commercial property. The commercial peak flow shall be equal to 2.0 x average day flow.
- School average day flows shall be based upon 25 gallons per day (10 hour day) per student with a peaking factor of 2.0 x average day flow.
- Open space tracts shall be assumed to generate no wastewater flow.

For preliminary design only, a density of 3.5 dwelling units per acre shall be utilized for single family residential properties without a land use plan. Final design shall be based on the actual density.

D. Hydraulic Design

The minimum allowable slope for an 8 inch sewer shall be equal to 0.0035 ft/ft unless otherwise approved by GWR. For all other sewer sizes, the sewer lines shall be designed and constructed to provide a minimum velocity of 2.0 feet per second (fps) when flowing full. A design Manning’s Formula “n” value equal to 0.013 shall be utilized for all pipe materials. Peak design velocities shall be less than 8 fps.

Other than private services, no sewers shall be less than 8 inches in diameter.

The ratio of flow depth in the pipe to the pipe diameter (d/D) shall not exceed 0.75 in peak dry weather flow. Consequently, the maximum sewer design capacity shall be equal to 91% of the full flow capacity at the peak design flow.

Manholes shall have a minimum drop of 0.10 feet across the manhole for all sewers with intersecting angles. When sewers with different diameters enter a manhole, the upstream pipe shall not have its crown lower than the crown of the downstream pipe.

Drop manholes shall be constructed in accordance with MAG standards when the difference between the upstream and downstream sewer inverts is greater than 2 feet. The manhole bottom shall be shaped to prevent solids deposition. Only outside drops shall be acceptable unless the inside manhole diameter is 6 feet or greater.

E. House and Building Service Connections

Residential sewer service connections shall be a minimum of 4 inches in diameter, and commercial service connections shall be a minimum of 6 inches. All service line connections shall be installed in accordance with MAG standards. Taps for future connections shall be marked. Each house or dwelling unit requires a separate sewer service connection.

Service connections 8 inches and larger in diameter shall be installed directly into a manhole. Direct service connections are not allowed for sewers 18 inches and larger and shall be installed into a manhole. No more than three service taps shall be made into any single manhole. Sewer service line inverts shall be a minimum of 6 inches above the crown of the outflow pipe.
Grease, oil, and/or sand interceptors shall be provided for all facilities when determined necessary by GWR. Refer to Paragraph F of Section II “Commercial and Industrial Operations” for additional details.

F. Commercial and Industrial Operations

Codes of Practice (COP) define the requirements for managing wastes discharged into the GWR sanitary sewer collection system from commercial and industrial operations. The COP provide guidance related to discharge regulations, interceptors, sampling, and record keeping and retention. Refer to Appendix A for additional requirements.

As of March 2005, operations regulated by GWR include RV parks, food services, dry cleaning, photographic imaging, and dental care. Contact GWR for the most current list of regulated operations or to determine the requirements of commercial and industrial operations which are currently not regulated by a COP.

Installation and maintenance of grease, oil, and sand interceptors shall be the responsibility of the property owner. The design shall be approved by GWR prior to installation and shall meet the requirements outlined in the COP. Minimum maintenance requirements for interceptors are also provided in the COP.

G. Easements

All sewer lines shall be located within street right-of-way or within a dedicated easement. The easement shall be dedicated to GWR and shall be restricted to GWR utilities only.

Dedicated easements shall be a minimum width of 20 feet wide for sewers less than 15 feet in depth and a minimum of 30 feet wide for sewers greater than 15 feet in depth. Sewer depths shall be measured from finished grade to the flow line. The easement width shall be increased by 5 feet if parallel water and sewer mains are to be located within the same easement.

In no case shall a sewer line shall be located within 10 feet of a property line, easement line, or a masonry block wall footing or within 15 feet of a building foundation.

Dedicated easements shall be free of obstructions and easily accessible to GRW. No permanent structures shall be located within the easement. Trees shall not be planted within 10 feet of any sewer. Easements shall not be located within storm water retention basins.

H. Testing Requirements

Testing shall be performed in accordance with GWR Code of Practice, GWR-CP-01-008.
Deflection testing shall be done on all sewer lines comprised of flexible materials. The entire length of sewer shall be tested for uniform slope. PVC sewer lines shall be low-pressure air tested utilizing ASTM Method F 1417-92.

Water tightness of sewers and manholes shall be determined by exfiltration or low-pressure air testing. Water tightness testing of the sewer line shall be performed to show that leakage does not exceed 200 gpd per inch diameter per mile of pipe. Exfiltration from manholes shall be limited to 0.1 gallons per hour per vertical foot of manhole.

Trench compaction and settlement testing shall be performed in accordance with the recommendations of a registered professional geotechnical engineer in the State of Arizona and as determined necessary by GWR. Test results shall be provided to the GWR inspector and shall be sealed by a registered professional geotechnical engineer in the State of Arizona.

The Contractor shall be responsible for an initial video inspection of the entire sewer line. However, after placement of pavement and prior to development of a punchlist, GWR will videotape the entire sewer system prior to acceptance at GWR's cost.

III. SEWAGE PUMP STATIONS

Sewage pump stations shall be capable of pumping the peak design wastewater flow with the largest pump out of service. Force main velocities shall be between 3 and 6 fps. Force mains shall be identified by placing marking tape one foot above the pipe along its entire length.

Acceptable pipe materials for pressure sewer pipe include PVC and DIP. Proposals for alternate pipe materials may be considered by GWR and shall be submitted in writing. Pressure class of PVC pipe shall be AWWA C-900 DR 14 Class 200 or AWWA C-905 DR 25 Class 165. In no case shall the pressure class of pressurized pipe be less than 150 psi.

DIP shall include an approved polyurethane or ceramic epoxy interior lining system with a minimum thickness of 40 mils. Each section of pipe and fitting shall be Holiday tested. Encasement of DIP with a loose type of polyethylene material per MAG standards may be required in corrosive soil environments at the discretion of GWR.

Joints shall be restrained when necessary in accordance with MAG Standards. At a minimum, restrained joints shall be provided at all tees, reducers, and dead ends. Thrust blocks as a substitute to restrained joints are not acceptable.

Isolation valves shall be eccentric type plug valves.

Odor control requirements will be evaluated on an individual project basis and may be required at the discretion of GWR. Odor control requirements apply to both the wetwell and air release valves.
Wetwells shall be lined with an approved coating system for corrosion protection. T-Loc systems are not acceptable.

Pump station equipment shall be protected from flooding and shall be designed to remain operable during a 100-year storm event. All pump stations shall include an automated backup power supply with a fuel reserve adequate for a 12-hour run time.
GLOBAL WATER RESOURCES, L.L.C.
RECLAIMED WATER SYSTEM STANDARDS

I. GENERAL REQUIREMENTS

Contact Global Water Resources for current standards for reclaimed water systems.
APPENDIX A

CODES OF PRACTICE
GLOBAL WATER RESOURCES

CODE OF PRACTICE

GWR-CP-01-LST

LIST OF EFFECTIVE CODES OF PRACTICE

CODES OF PRACTICE

The following Codes of Practice are enforced by Global Water:

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Title</th>
<th>Revision/Status</th>
<th>Office of Primary Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWR-CP-01-01-LST</td>
<td>List of Effective Codes of Practice</td>
<td>000</td>
<td>Compliance</td>
</tr>
<tr>
<td>GWR-CP-01-02-DEF</td>
<td>Definitions</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-001</td>
<td>RV Park Operations</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-002</td>
<td>Food Service Operations</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-003</td>
<td>Dry Cleaning Operations</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-004</td>
<td>Photographic Imaging Operations</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-005</td>
<td>Dental Operations</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-006</td>
<td>Determination of Capacity Impact of Commercial Units</td>
<td>000</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-007</td>
<td>Optimizing Landscape Configuration</td>
<td>001</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-008</td>
<td>Acceptance of Underground Facilities</td>
<td>003</td>
<td>Engineering &amp; Projects</td>
</tr>
<tr>
<td>GWR-CP-01-02-009</td>
<td>Water From Hydrants/Construction Water</td>
<td>DRAFT</td>
<td>Operations</td>
</tr>
<tr>
<td>GWR-CP-01-02-100</td>
<td>On-Call Practices</td>
<td>000</td>
<td>Operations</td>
</tr>
<tr>
<td>GWR-CP-01-02-111</td>
<td>Vehicle Guidelines</td>
<td>001</td>
<td>Operators</td>
</tr>
<tr>
<td>GWR-CP-01-02-122</td>
<td>SCWC Emergency Operations Plan</td>
<td>000</td>
<td>Operations</td>
</tr>
</tbody>
</table>
GLOBAL WATER RESOURCES

GLOBAL WATER RESOURCES (GWR)

CODE OF PRACTICE

GWR-CP-01-DEF

DEFINITIONS

PROHIBITED WASTE

Prohibited waste means:

Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

Flammable or Explosive Waste

Any waste, which by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

Obstructive Waste

Any waste which by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl and solidified fat.

Corrosive Waste

Any waste with corrosive properties which, by itself or in combination with any other substance, may cause damage to any sewer or sewage facility or which may prevent safe entry by authorized personnel.

High Temperature Waste

A high temperature waste is:

a. Any waste which, by itself or in combination with another substance, will create heat in amounts which will interfere with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility;
b. Any waste which will raise the temperature of waste entering any sewage facility to 40 degrees Celsius (104 degrees Fahrenheit) or more;
c. Any non-domestic waste with a temperature of 65 degrees Celsius (150 degrees Fahrenheit) or more.
Biomedical Waste

Any of the following categories of biomedical waste: human anatomical waste, animal waste, untreated microbiological waste, waste sharps and untreated human blood and body fluids.

Miscellaneous Wastes

Any waste, other than sanitary waste, which by itself or in combination with another substance:

a. constitutes or may constitute a significant health or safety hazard to any person;
b. may interfere with any sewer or sewage treatment process;
c. may cause a discharge from a sewage facility to contravene any requirements by or under any ADEQ or ArPDES discharge permit or any other act, or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation; or
d. may cause biosolids to fail criteria for beneficial land application.

RESTRICTED WASTE

Restricted waste means:

Specified Waste

Any waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the limits set out below. All concentrations are expressed as total concentrations which includes all forms of the contaminant, whether dissolved or undissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods.

<table>
<thead>
<tr>
<th>CONVENTIONAL CONTAMINANTS [mg/L]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical Oxygen Demand (BOD)</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
</tr>
<tr>
<td>Oil and Grease(^1)</td>
</tr>
<tr>
<td>Suspended Solids</td>
</tr>
</tbody>
</table>

\(^1\) Total oil and grease includes oil and grease (hydrocarbons) (see Organic Contaminants Table)
<table>
<thead>
<tr>
<th>ORGANIC CONTAMINANTS [mg/L]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
</tr>
<tr>
<td>Toluene</td>
</tr>
<tr>
<td>Xylenes</td>
</tr>
<tr>
<td>Polynuclear Aromatic Hydrocarbons (PAH)²</td>
</tr>
<tr>
<td>Phenols</td>
</tr>
<tr>
<td>Oil and Grease (hydrocarbons)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INORGANIC CONTAMINANTS [mg/L]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimony</td>
</tr>
<tr>
<td>Arsenic (As)</td>
</tr>
<tr>
<td>Barium</td>
</tr>
<tr>
<td>Beryllium</td>
</tr>
</tbody>
</table>

² Note: Polynuclear Aromatic Hydrocarbons (PAH) include:

   a. naphthalene benzo(a)anthracene
   b. acenaphthylene chrysene
   c. acenaphthene benzo(b)fluoranthene
   d. fluorene benzo(k)fluoranthene
   e. phenanthrene benzo(a)pyrene
   f. anthracene dibenzo(a,h)anthracene
   g. fluoranthene indeno(1,2,3-cd)pyrene
   h. pyrene benzo(g,h,i)perylene
### INORGANIC CONTAMINANTS [mg/L]

<table>
<thead>
<tr>
<th>Compound</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (Cd)</td>
<td>0.004</td>
</tr>
<tr>
<td>Chloride (Cl)</td>
<td>1500</td>
</tr>
<tr>
<td>Chromium (Cr)</td>
<td>0.08</td>
</tr>
<tr>
<td>Cobalt (Co)</td>
<td>5</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>1</td>
</tr>
<tr>
<td>Cyanide (CN)</td>
<td>0.16</td>
</tr>
<tr>
<td>Fluoride (F)</td>
<td>3.2</td>
</tr>
<tr>
<td>Iron (Fe)</td>
<td>50</td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>0.04</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>5</td>
</tr>
<tr>
<td>Mercury (Hg)</td>
<td>0.0016</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>5</td>
</tr>
<tr>
<td>Nickel (Ni)</td>
<td>0.08</td>
</tr>
<tr>
<td>Selenium (Se)</td>
<td>0.04</td>
</tr>
<tr>
<td>Silver (Ag)</td>
<td>0.5</td>
</tr>
<tr>
<td>Sulphate (SO₄)</td>
<td>1500</td>
</tr>
<tr>
<td>Sulphide (S)</td>
<td>1</td>
</tr>
<tr>
<td>Thallium</td>
<td>0.0016</td>
</tr>
<tr>
<td>Zinc (Zn)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Food Waste**

Any non-domestic waste from cooking and handling of food that, at the point of discharge into a sewer, contains particles larger than 0.5 centimeters in any dimension.
Radioactive Waste

Any waste containing radioactive materials that, at the point of discharge into a sewer, exceeds radioactivity limitations as established by regulatory agencies.

pH Waste

Any non-domestic waste which, at the point of discharge into a sewer, has a pH lower than 6 or higher than 9.0, as determined by either a grab or a composite sample.

Dyes and Coloring Material

Dyes or coloring materials which may pass through a sewage facility and discolor the effluent from a sewage facility except where the dye is used by the Sewer Company, or one or more of its agents, as a tracer.

Miscellaneous Restricted Wastes

Any of the following wastes:

a. seawater
b. PCBs
c. chlorinated phenols
   3

d. pesticides
e. tetrachloroethylene

---

3 Chlorinated phenols include:

- chlorophenol (ortho, meta, para)
- dichlorophenol (2,3, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-)
- trichlorophenol (2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, 3,4,5-)
- tetrachlorophenol (2,3,4,5-, 2,3,4,6-, 2,3,5,6-)
- pentachlorophenol
Appendix F

Letters of Credit from JP Morgan and Wells Fargo
April 12, 2006

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

Re: Financial Assurance of Capital Funding for Hassayampa Utilities Company

Dear Ms. Hoffman:

This letter has been prepared to provide evidence of Global Water Resources' financial capability to build the proposed Water Reclamation Facilities and sewer and reclaimed water infrastructure to serve the area planned in the Hassayampa Utilities Company 208 plan amendment for the Belmont/Tonopah area. Hassayampa utilities Company is a wholly-owned subsidiary of Global Water Resources, Inc. who, through its relationship with Levine Investments, has access to immediately available funds in the low nine figures for the purpose of funding capital improvements as they relate to the proposed 208 Plan Amendment.

Should you have any further questions regarding this matter, please feel free to contact me at 480-367-3279.

Sincerely,

Jamie M. Altholz
Vice President
April 13, 2006

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

Re: Financial Assurance of Capital Funding for Hassayampa Utilities Company

Dear Ms. Hoffman:

This letter has been prepared to provide evidence of Global Water Resources' financial capability to build the proposed Water Reclamation Facilities and sewer and reclaimed water infrastructure to serve the area planned in the Hassayampa Utilities Company 208 plan amendment for the Belmont/Tonopah area. Hassayampa utilities Company is a wholly-owned subsidiary of Global Water Resources, Inc. who, through its relationship with Levine Investments, has access to immediately available funds in the low nine figures for the purpose of funding capital improvements as they relate to the proposed 208 Plan Amendment.

Should you have any further questions regarding this matter, please feel free to contact me at 480-348-5072.

Sincerely,

[Signature]

Ellen K. Bond
Senior Private Banker
Vice President
GLOBAL WATER RESOURCES, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2005 AND 2004

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTILITY PLANT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utility plant in service</td>
<td>$67,891,156</td>
<td>$24,499,924</td>
</tr>
<tr>
<td>Less accumulated depreciation and amortization</td>
<td>(2,600,655)</td>
<td>(740,213)</td>
</tr>
<tr>
<td>Total</td>
<td>65,290,501</td>
<td>23,759,712</td>
</tr>
<tr>
<td>Construction work-in-progress</td>
<td>15,804,683</td>
<td>6,483,989</td>
</tr>
<tr>
<td>Utility plant—net</td>
<td>81,185,184</td>
<td>30,243,701</td>
</tr>
<tr>
<td>CURRENT ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>134,423</td>
<td>1,297,904</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,294,473</td>
<td>505,056</td>
</tr>
<tr>
<td>Accrued utility revenue</td>
<td>61,264</td>
<td>24,544</td>
</tr>
<tr>
<td>Other receivable</td>
<td>173,955</td>
<td></td>
</tr>
<tr>
<td>Infrastructure coordination and financing fees receivable</td>
<td>754,650</td>
<td>466,050</td>
</tr>
<tr>
<td>Other current assets</td>
<td>100,603</td>
<td>33,220</td>
</tr>
<tr>
<td>Total current assets</td>
<td>2,519,368</td>
<td>2,362,754</td>
</tr>
<tr>
<td>OTHER ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible assets—net</td>
<td>23,673,656</td>
<td>17,146,029</td>
</tr>
<tr>
<td>Security and escrow deposits</td>
<td>415,308</td>
<td>464,950</td>
</tr>
<tr>
<td>Stack price in excess of book</td>
<td>5,384,161</td>
<td></td>
</tr>
<tr>
<td>Deferred acquisition costs</td>
<td>157,318</td>
<td>271,156</td>
</tr>
<tr>
<td>Total other assets</td>
<td>29,880,443</td>
<td>17,882,135</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$113,384,995</td>
<td>$50,452,610</td>
</tr>
</tbody>
</table>

LIABILITIES AND MEMBERS' EQUITY

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT LIABILITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$4,775,790</td>
<td>$1,445,857</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>4,311,761</td>
<td>853,617</td>
</tr>
<tr>
<td>Meter deposits</td>
<td>131,750</td>
<td>69,750</td>
</tr>
<tr>
<td>Loan payable—current portion</td>
<td>-</td>
<td>720,000</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>9,219,301</td>
<td>3,089,224</td>
</tr>
<tr>
<td>NONCURRENT LIABILITIES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>21,837,420</td>
<td>3,890,066</td>
</tr>
<tr>
<td>Advances in aid of construction</td>
<td>15,622,579</td>
<td>8,068,043</td>
</tr>
<tr>
<td>Deferred income tax</td>
<td>304,419</td>
<td>-</td>
</tr>
<tr>
<td>Contributions in aid of construction—net</td>
<td>3,464,993</td>
<td>-</td>
</tr>
<tr>
<td>Loan payable—line of credit outstanding</td>
<td>23,153,423</td>
<td>6,780,000</td>
</tr>
<tr>
<td>Other long-term debt</td>
<td>17,196,802</td>
<td>-</td>
</tr>
<tr>
<td>Total noncurrent liabilities</td>
<td>81,378,736</td>
<td>18,739,009</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>60,598,037</td>
<td>21,828,233</td>
</tr>
</tbody>
</table>

MEMBERS' EQUITY:

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributed capital—net of principal distributions</td>
<td>26,000,000</td>
<td>27,500,000</td>
</tr>
<tr>
<td>Distributions, preferred interest</td>
<td>(4,555,737)</td>
<td>-</td>
</tr>
<tr>
<td>Distributions, taxes</td>
<td>(3,944,077)</td>
<td>-</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>5,286,772</td>
<td>1,124,377</td>
</tr>
<tr>
<td>Total members' equity</td>
<td>22,786,958</td>
<td>28,624,377</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$113,384,995</td>
<td>$50,452,610</td>
</tr>
</tbody>
</table>

See notes to consolidated financial statements.
GLOBAL WATER RESOURCES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2005 AND 2004

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATING REVENUES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water usage</td>
<td>$5,302,254</td>
<td>$1,805,702</td>
</tr>
<tr>
<td>Wastewater services</td>
<td>2,752,303</td>
<td>1,007,304</td>
</tr>
<tr>
<td>Infrastructure coordination and financing fees</td>
<td>4,346,527</td>
<td>1,843,300</td>
</tr>
<tr>
<td>Other</td>
<td>1,596,239</td>
<td>243,776</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td><strong>13,977,323</strong></td>
<td><strong>4,900,282</strong></td>
</tr>
<tr>
<td>OPERATING EXPENSES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations and maintenance</td>
<td>1,424,392</td>
<td>589,375</td>
</tr>
<tr>
<td>General and administrative</td>
<td>4,008,902</td>
<td>1,188,701</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td><strong>5,433,294</strong></td>
<td><strong>1,778,076</strong></td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,763,133</td>
<td>740,237</td>
</tr>
<tr>
<td>Amortization of intangibles</td>
<td>1,703,882</td>
<td>831,861</td>
</tr>
<tr>
<td><strong>OPERATING INCOME</strong></td>
<td><strong>5,077,014</strong></td>
<td><strong>1,550,108</strong></td>
</tr>
<tr>
<td>OTHER INCOME (EXPENSE):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>1,860</td>
<td>3,226</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(951,532)</td>
<td>(255,946)</td>
</tr>
<tr>
<td>Other income</td>
<td>123,776</td>
<td>2,238</td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td><strong>(825,896)</strong></td>
<td><strong>(250,482)</strong></td>
</tr>
<tr>
<td><strong>EARNINGS BEFORE INCOME TAX</strong></td>
<td><strong>4,251,118</strong></td>
<td><strong>1,299,626</strong></td>
</tr>
<tr>
<td>Income tax</td>
<td>(88,718)</td>
<td></td>
</tr>
<tr>
<td><strong>NET INCOME</strong></td>
<td><strong>$4,162,400</strong></td>
<td><strong>$1,299,626</strong></td>
</tr>
</tbody>
</table>

Set notes to consolidated financial statements.
Appendix G

Illustration of Lift Station at Future Campus 3 and Infrastructure to Campus 1
Appendix H

Illustration of Infrastructure to Campus 2 from Belmont
Appendix I

Maricopa County Sponsorship Letter
May 22, 2007

Maricopa Association of Governments
302 North 1st Avenue, Suite 300
Phoenix, AZ 85003

Attention: Ms. Lindy Bauer, Environmental Director

Re: Global Water Resources, HUC Northeast Service Area
    Clean Water Act, MAG 208 Amendment

Dear Ms. Bauer:

In a letter dated February 22, 2007, Global Water submitted revisions to its 208 Water Quality Management Plan Amendment Application, HUC Northeast Service Area, prepared by DSWA, October 2006, to Maricopa County Environmental Services Department (Department). The application proposes four water reclamation facilities (WRF) to serve a 63.6-square mile service area that includes the Belmont, Hassayampa Ranch, 339th Avenue Project, and other developments that extend from the CAP canal southward to Salome Highway and from the Hassayampa River westward to Wintersburg Road. The four WRF are:

<table>
<thead>
<tr>
<th>WRF No.</th>
<th>Location</th>
<th>Approximate WRF Size (acres)</th>
<th>Ultimate Capacity (MGD)</th>
<th>Starting Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North of Indian School Rd., east of 331st Ave. SEC 22, T2N, R5W</td>
<td>19.75 with 10.1 optional acres</td>
<td>3.0 (9.0 with the optional acres)</td>
<td>2008</td>
</tr>
<tr>
<td>2</td>
<td>North of Buckeye Rd., west of 339th Ave. SEC 8, T1N, R5W</td>
<td>29.3</td>
<td>10.0</td>
<td>2008</td>
</tr>
<tr>
<td>3</td>
<td>North of Thomas Rd., east of 355th Ave. SEC 30, T2N, R6W</td>
<td>24.0</td>
<td>12.0</td>
<td>2012</td>
</tr>
<tr>
<td>4</td>
<td>North of Caneelback Rd., west of 363rd Ave. SEC 14, T2N, R6W</td>
<td>31.2</td>
<td>14.0</td>
<td>2015</td>
</tr>
</tbody>
</table>

1 WRF 3 & 4 may initially be constructed as lift stations that convey flow to WRF’s that are underutilized.

In accordance with the MAG Water Quality Management Plan, Section 4.4 (MAG 208 Amendment Process), this document was submitted to the Department for review and sponsorship, since the facility is located within an unincorporated area of Maricopa County, outside of any municipal planning area.

Based on a review of the proposed MAG 208 Amendment, the Department has determined that the proposed MAG 208 Amendment is acceptable and complies with the MAG 208 Areawide Water...
May 22, 2007
Global Water Resources, HUC Northeast Service Area

Quality Management Plan. The proposed WRF do not conflict with Maricopa County plans for the area.

The facilities are located within three miles of the Town of Buckeye municipal planning area. The Town has provided a letter to the Department (attached), dated February 15, 2007, stating that the Town objects to the Global Water MAG 208 Amendment application due to significant concerns.

The HUC Northeast Service Area is located within the Lower Hassayampa Sub-basin aquifer. The Lower Hassayampa Sub-basin Hydrologic Study and Computer Model, (Brown and Caldwell, November 15, 2006) predicts that groundwater levels in the sub-basin will be significantly impacted unless all approved, committed, and pending developments recharge effluent equal to at least 30% of their total water use. The HUC application states that reclaimed water will be used as the primary source of irrigation water and for use in any recreational impoundments. It does not identify the percentage of reclaimed water that will be recharged.

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

If you have any questions or comments, please contact me at 506-6666.

Sincerely,

Kevin Chadwick, P.E.
Manager, MCESD Water and Waste Management Division

cc: John Power, P.E., Director, MCESD
Dale G. Bodilya, P.E., Manager, MCESD, W&WM, Treatment Plant Section
Christine Close, P.E., Damon S. Williams, Associates
Robin Bain, P.E., Manager, Permits, Global Water Resources
David Wilcox, Town Manager, Town of Buckeye
Utilities Division - Engineering Section, Arizona Corporation Commission
Appendix J

Town of Buckeye Letter
Town of Buckeye

100 North Apache Road, Buckeye, AZ 85326

February 15, 2007

Mr. Kenneth James, P.E., Senior Civil Engineer
Maricopa County Environmental Services Department
1001 N. Central Avenue, Suite #150
Phoenix, AZ 85004


Dear Mr. James:

The Town of Buckeye (the Town) has reviewed the referenced application for a Clean Water Act Section 208 Amendment. The application seeks approval of a service area for the Belmont and Hassayampa Ranch developments and sets forth Global Water’s plans for water and wastewater. The Town has significant concerns that are summarized herein and, as a result, the Town objects to the application submitted by Global Water.

Since the initial application by Global Water, an extensive hydrologic study of the Lower Hassayampa Sub-Basin (Brown and Caldwell, November 15, 2006) has been completed. The study demonstrates the critical need for the water resources of the area to be managed on a regional scale to ensure that sustainable water supplies are available to all planned future developments in the Lower Hassayampa Sub-basin and the contiguous areas of the West Salt River Valley Sub-basin.

The Town is concerned that decisions made by Global Water to benefit one portion of the Lower Hassayampa Sub-basin (the Belmont and Hassayampa Ranch developments) may have negative consequences affecting water supplies in other areas of the Sub-basin.

Additionally, the Town is concerned that Global Water’s priority is to sell the reclaimed water for profit rather than a priority of requiring recharge in critical areas. Global Water’s application checklist states that “a reclaimed water distribution system is planned to return reclaimed water to the development projects for use in recreational lakes and landscape irrigation.” The checklist also states that “class A+ reclaimed water is distributed and sold to its many users who in turn compensate the Company for its treatment and delivery costs in accordance with tariff rates promulgated by the [Arizona Corporation Commission].” The Belmont development’s Application for an Analysis of
an Assured Water Supply submitted to the Arizona Department of Water Resources indicated that effluent will be used directly on golf courses (six golf courses are planned for the Belmont development) and the Application did not indicate that effluent would be recharged and recovered by pumping for future water supplies. Groundwater recharge (not just reuse) is a priority of the Town, which is evidenced by an ordinance passed by the Town on November 7, 2006 that requires reuse and recharge of reclaimed water. The ordinance applies to all lands within the corporate limits and planning area of the Town. On the other hand, Global Water's application indicates that “reclaimed water in excess of reuse demand can be recharged...” and the application adds that “seasonally, as directed by demand, excess reclaimed water will be recharged to the aquifer under an [aquifer protection permit] and will be stored for credit via an Underground Storage Facility (USF) permit. As a last resort, reclaimed water may be discharged to ephemeral washes.” The Town has concerns that excess reclaimed water may only be available during cool, wet weather and that recharge will infrequently be conducted by Global Water. Furthermore, the Town feels that discharge to washes would not be necessary as a last resort, if adequate recharge facilities were planned.

Finally, the recharge facilities proposed by Global Water are all located at the proposed water reclamation facilities, which are in the southern one-half of the Belmont and Hassayampa Ranch development area and not in the northern portion of the area where recharge will be most needed. The Belmont development area will be one of the first areas in the Sub-basin to experience an excessive groundwater level decline (due to shallow bedrock and a limited aquifer thickness), if recharge is not conducted in the critical areas.

For all of the foregoing reasons, the Town urges the denial of Global Water’s referenced application.

If you have any questions or comments, please contact Ron Whitley, R.G. at (623) 349-6822.

Sincerely,

David W. Wilcox
Town Manager

cc: Julie Hoffman, Maricopa Association of Governments
Trevor Hill, Global Water Resources
Sheila Schmidt, Gust Rosenfeld
Town Council