Technical Memorandum

To: Anisa Divine

From: Matt Zidar (GEI)

Prepared: Aaron McWilliams (GEI)

Reviewed: Lorena Ospina (GEI)

Date: January 18, 2011

Re: Disadvantaged Community Needs Assessment Technical Memorandum (Working Group Draft)

Introduction

The Imperial Integrated Regional Water Management Plan (IRWMP) will identify and integrate projects, programs, and policies for demand, water supply, water quality, and flood management for the Imperial Region (Region). The Imperial Region Water Forum (Water Forum) is participating in development of the IRWMP. A Program Management Team (PMT) is coordinating the overall effort. The PMT includes the two water management agencies that convened the Water Forum; Imperial Irrigation District (IID), Imperial County, and the City of Imperial. The Region covers approximately 3,100 square-miles with a population of over 165,000. A key component of the IRWMP is community outreach. This includes outreach to non-signatory stakeholders, interested parties, and disadvantaged communities (DAC's). Initial outreach efforts began in the early stages of the process with introductory letters to representatives of each community describing the IRWMP purpose, and invitations to participate in the decision-making process. The goals of the outreach program, especially as they relate to DAC's, are to:

- Identify and address the water-related needs of communities in the Region;
- Build relationships within and between community representatives;
- Encourage local participation in regional planning efforts, and;
- Develop regional projects and programs that benefit the communities and the Region.

The objectives of the DAC outreach program are as follows:

- Identify DAC contacts;
- Work with DAC's representatives to inventory and identify water supply, water quality and stormwater related needs;
- Given the current resources of the Imperial IRWM Plan, work with DAC's to develop project concepts to meet the needs and be included in the IRWMP; and
- Support DAC's to identify sources of funding that meet managerial, engineering and financial needs; and develop final project designs that support applications for funding.

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DAC's Within the Imperial IRWM Plan Region

As defined by the California Public Resources Code (PRC) Section 75005(g)

> ***Disadvantaged community (DAC) means a community with a median household income (MHI) less than 80% of the statewide average (SMHI). Severely disadvantaged community (SDAC) means a community with a median household income less than 60% of the statewide average.***

An evaluation based on 2000 Census data was completed to determine the DAC's within the Region. According to the 2000 Census data, the California SMHI was $47,493. Thus, county subdivisions (CCD's), census designated places (CDP's), and cities with an MHI of $37,994 or less were considered DAC's. Those CCD's, CDP's, and cities with an MHI of $28,496 or less were considered SDAC's. The following table, Table 1, lists all 2000 Census CCD's, CDP's, and cities in the Region, the corresponding MHI, a percent comparison to the SMHI, and notes on the area. Of the 19 locations on the table, 16 meet the definition of a DAC. Of those 16 DACs, 7 meet the definition of a SDAC. The City of Imperial, the area surrounding the City of Imperial, and the area surrounding the City of Holtville do not meet the definition of a DAC.

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TABLE 1				
Census Tract (2000 Census)	**MHI in 1999**	**MHI as % of CA**	**Status**	**Remarks**
California	$ 47,493			
County Subdivisions (CCD)				
Brawley CCD	$ 31,506	66%	DAC	Area surrounding Brawley
Calexico CCD	$ 28,915	61%	DAC	Area surrounding Calexico
Calipatria-Westmorland CCD	$ 26,160	55%	SDAC	Area surrounding Calipatria, Westmorland, and Niland
East Imperial CCD	$ 20,982	44%	SDAC	Area surrounding Bombay Beach, Palo Verde, Fort Yuma; East portion of Imperial County
El Centro CCD	$ 35,851	75%	DAC	Area surrounding Heber and El Centro;
Holtville CCD	$ 40,247	85%	---	Area surrounding Holtville
Imperial CCD	$ 47,464	100%	---	Area surrounding Imperial
West Imperial CCD	$ 19,865	42%	SDAC	Area surrounding Ocotillo, Salton City; West portion of Imperial County
Census Designated Places (CDP)				
Heber CDP	$ 27,221	57%	SDAC	Community of Heber
Niland CDP	$ 25,592	54%	SDAC	Community of Niland
Ocotillo CDP	$ 23,438	49%	SDAC	Community of Ocotillo
Seeley CDP	$ 31,058	65%	DAC	Community of Seeley
Cities				
Brawley	$ 31,277	66%	DAC	
Calexico	$ 28,929	61%	DAC	
Calipatria	$ 30,962	65%	DAC	
El Centro	$ 33,161	70%	DAC	
Holtville	$ 36,318	76%	DAC	
Imperial	$ 49,451	104%	---	
Westmorland	$ 23,365	49%	SDAC	

Data from 2000 census. Downloaded from: http://factfinder.census.gov/

Maps available at: http://www2.census.gov/plmap/pl_trt/st06_California/c06025_Imperial/

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Description/Summary of Outreach Activities

The DAC's were engaged during the early stages of the Imperial IRWMP planning process. To begin identifying disadvantaged communities, a contact list was developed for all cities, communities, and special districts located within the Region which provide domestic water service, wastewater collection service, and/or stormwater collection service (collectively - water systems). The Capital Improvement Plans, Master Plans, General Plans, and Service Area Plans of each community were sought and reviewed where available, to determine the current state of their infrastructure and of planning efforts. System information was compiled into an Infrastructure Matrix which was mailed in advance to the interview participants. The information included in the Infrastructure Matrix consisted of the following:

- Stormwater
    - Land use policy, design criteria,
    - Flooding/system deficiencies, capital improvement plans.
- Wastewater
    - Current and future plant size/treatment capacity, average flows, and level of treatment
    - Capital improvements planned for collection system and/or WWTP, including plans for water recycling,
    - Compliance requirements.
- Potable Water
    - Current and future plant size/treatment capacity, average demand, raw and clear water storage capacity,
    - Distribution system status/deficiencies, capital improvement plans and schedule for implementation,
    - Disaster/emergency/shortage preparedness.

A letter was sent to each of the community representatives which included an explanation of the goals and objectives of the Imperial IRWMP and intent of the Water Forum to address the needs and interests of the DAC's within the Region. In addition to the letter, an email with the agency-specific Infrastructure Matrix was sent to the engineering, planning, and/or public works contact for each community. The email explained the source of the data in the Infrastructure Matrix, and requested that the information within the Matrix be corroborated or updated to reflect the current condition. A telephone interview was scheduled with each public agency's representatives to give them an opportunity to describe specific needs, list priority projects, and articulate issues or concerns with their water systems that weren't necessarily addressed in the Infrastructure Matrix. The following table, Table 2, displays the communities and representatives with whom we exchanged correspondence and the date of the telephone interview. The information collected from the correspondence and the interviews is described in the section below.

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TABLE 2		
Community/Agency	**Interviewee(s)**	**Date of Interview**
Brawley	Yasmin Arellano (Public Works Director), Gordon Gaste (Planning Director)	9/3/2010
Calexico	Unable to contact, no response	
Calipatria	Justina Arce (Senior Planner, The Holt Group), David Godsey (Superintendent, Golden State Water Company)	8/18/2010 10/27/1010
El Centro	Terry Hagen (Director of Public Works/City Engineer), Norma Villacaña (Planning and Zoning Director), Randy Hines (WWTP Supervisor)	10/27/2010
Heber	John Jordan (General Manager)	10/28/2010
Holtville	Justina Arce (Senior Planner, The Holt Group)	8/18/2010
Imperial	Unable to contact, no response	
Niland	David Godsey (Superintendent, Golden State Water Company)	10/27/2010
Seeley	Anthony Munger(Supervisor)	10/28/2010
Westmorland	Unable to contact , no response	
Golden State Water Company	David Godsey (Superintendent, Golden State Water Company)	10/27/2010
Imperial County	Bill Brunet (Director of Public Works), Jim Minnick (Planning Division Manager)	11/1/2010

Results of Outreach Activities

While conducting outreach activities, up-to-date information on the wastewater collection, stormwater collection, and potable water distribution systems in each community were obtained when provided, and specific needs and concerns were documented when expressed by the DAC representatives. The current state of each of the systems, system notes, and system issues/concerns gathered from each interview can be found in the Infrastructure Matrix, which can be found at the end of this TM. This Matrix consists of three tables (Stormwater, Wastewater, and Potable Water). An interview summary for each community, as well as a list of priority projects identified by each of the DAC representatives, is presented in the subsequent sections.

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City of Brawley

An interview with the Public Works Director, Yazmin Arellano, and the Planning Director, Gordon Gaste, was conducted on September 3, 2010. The current state of each water system is as follows:

- **Stormwater** – Portions of the City adjacent to the New River are prone to flooding as a result of inadequacies in the stormwater system. Approximately 50% of the stormwater collection system in the City is a CSO (combined sewer overflow). The City has neither a Master Drainage Plan nor an electronic model of their stormwater collection system. Future capital investments for the City are identified in their Capital Improvement Plan; however, the implementation of these improvements is dependent upon available funds. The City is interested in obtaining grants to improve their stormwater system. Studies have been performed which indicate that a few areas in the southeast part of the City exhibit good percolation. Priority Projects for the stormwater system include:
    - Separation of stormwater conveyance and sewer system conveyance, and
    - Development of a Master Drainage Plan.

- **Wastewater** – The current design capacity of the WWTP is 5.9 MGD, with an average daily flow of 4.7 MGD (80% of capacity). The WWTP has been, and is still, under cease and desist orders for exceedance of their NPDES discharge requirements. However, upgrades to the secondary treatment system are underway and expected to be complete by December, 2010. The improvements are expected to bring effluent discharge into compliance with their NPDES permit and requirements set forth by the RWQCB. Funding for the upgrades to the WWTP was obtained from SRF Funds in 2010, as well as $10M from the American Recovery & Reinvestment Act of 2009 (ARRA) Grant funds. The City is in talks with ORMAT Energy (a geothermal energy company) regarding the WWTP. While discussions are still preliminary, ORMAT has proposed upgrading the WWTP to tertiary treatment in exchange for access to tertiary treated effluent. The Capital Improvement Plan has identified the need to expand the capacity of the WWTP, which will cost on the order of $27M. The CIP has also identified the need to rehabilitate a wastewater lift station, which consists of a wet well and pump and would cost $500k. The City has also had discussions with the City of Imperial to participate in the Keystone WWTP Project to service planned expansion in parts of the City that may be better served from a combined regional facility. No firm agreements have been established. Priority Projects for the wastewater system include:
    - Expansion of WWTP Capacity, and
    - Rehabilitation of a wastewater pump station.

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- **Potable Water** – The current design capacity of the WTP is 15MGD, with an average daily demand (ADD) of 8.4MGD (approximately 56% of design capacity). The current raw water storage and clear water storage are 35MG and 9MG respectively. Though there is currently ~4 days of raw water storage, the City would like to increase their raw water storage capacity to 52MG (~6 days). The City does not have an electronic model of their distribution system, but bottlenecks and excess pressure zones have been identified. A majority of the distribution system consists of cast iron pipe (~39%) and asbestos cement pipe (~41%), while the remainder consists of PVC (~20%). A number of the Capital Improvement projects involve replacement of cast iron and AC pipe (see 'Priority Projects' below). The current Master Plan is outdated, though City has selected a firm to update the Master Plan in the form of an IRP, including stormwater, wastewater, and potable water. Programs identified in the outdated plan have not been implemented due to lack of funds. The 2010 UWMP was completed by Dynamic Engineering, and has been submitted. Priority Projects for the potable water system include:
    - Expansion of raw water storage capacity, and pumping capacity at the water treatment plant,
    - Main Street Water Line Replacement,
    - 86th Street Water Line Replacement, and
    - Andrata Place Area Improvement (cast iron pipeline replacement).

City of Calexico

The City of Calexico was not able to be contacted or did not respond to queries.

City of Calipatria

An interview with Justina Arce, a Senior Planner for The Holt Group (who provides Planning and Engineering Services for the City of Calipatria) was conducted on August 18, 2010. An interview with Local Operations Superintendent for Golden State Water Company, David Godsey, was conducted on October 27, 2010. The current state of each water system is as follows:

- **Stormwater** – The City does not have a formal Master Drainage Plan, and relies on IID design criteria for sizing of stormwater management facilities. The current storm drain system does not have adequate capacity to provide flood protection. While light rain events are not a problem, larger events (25-year and over) cause puddling, ponding, and inundation of low lying areas. This flooding is not limited to those portions of the City closest to the Alamo River; rather flooding is highly variable and simply dependent upon topography. A lack of infrastructure, as well as funding, makes flood mitigation very difficult in the City. A Priority Project for the stormwater system is:
    - Development of a Stormwater Management Plan.

- **Wastewater** - Priority Projects for the wastewater system includes:
    - Wastewater collection system replacement throughout the city, and
    - Development of a Wastewater Management Plan.

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- **Potable Water** – Golden State Water Company operates the water treatment plant and distribution system for Niland, Calipatria, and the Calipatria Prison. The current treatment capacity is 6MGD with an ADD of approximately 2.5MGD (~42% of design capacity). Both the raw water and clear water capacity are currently 9MG (~3-5 days of storage). Golden State Water Company is contemplating the installation of a SCADA system to better manage the distribution system, and to alleviate the occurrence of THMs in the system. A Priority Projects for the potable water system is:
    - Installation of a SCADA system to control how/where water is distributed. Would assist with THM mitigation.

City of El Centro

A telephone interview was conducted with the Director of Public Works and City Engineer, Terry Hagen, Planning and Zoning Director, Norma Villicaña, and WWTP Supervisor, Randy Hines on October 27, 2010. The current state of each water system is as follows:

- **Stormwater** – Currently, the City captures runoff in retention/detention basins, which then discharge to IID drains. This arrangement does not provide adequate capacity to provide flood protection. The City has completed a draft Master Drainage Plan), but has not yet adopted it. Included in the Master Drainage Plan are locations where flooding and/or conveyance have become a problem and recommended improvements. Though the draft Master Drainage Plan has not yet been approved and released to the public, indications are that to implement recommendations of the Master Drainage Plan would cost approximately $200M. A Capital Investment plan is being developed. Currently, the City makes improvements when funds are available. Also in development is the creation of an electronic model of the City's storm drain system (being produced by Carollo Engineers). It was acknowledged that a regional stormwater management facility (and a Regional Flood Control District to administer it) would likely provide adequate mitigation of stormwater, and postpone the necessity of implementing the Master Drainage Plan 15-20 years. Priority Projects for the stormwater system includes:
    - Implementation of the Master Drainage Plan,
    - Creation of a Regional Flood Control District, and
    - Development of a Regional Stormwater Management System.

- **Wastewater** – The current design capacity of the WWTP is 8MGD, with an average daily flow of 3.6MGD (45% of capacity). The WWTP has secondary treatment with UV disinfection. While not a consistent problem, effluent discharges from the WWTP are occasionally out of compliance. Development has occurred adjacent to the WWTP, and complaints have been made regarding the odor caused by the WWTP. Due to the poor percolation of local soils, high water table, old infrastructure, and depth of infrastructure, groundwater infiltration has become a problem. Capital Improvement plans would be needed to upgrade the collection system and WWTP. This plan has been completed, but has not yet been adopted. The upgrades would be dependent upon development impact fees and infrastructure and reimbursement agreements. The City is in talks with ORMAT Energy (a geothermal energy company) regarding the WWTP.

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Talks are still preliminary, but ORMAT has proposed upgrading the WWTP to tertiary treatment in exchange for access to tertiary treated effluent. In addition to supplying ORMAT with tertiary treated effluent, it has been proposed that purple pipe could be run to local solar farms, highway dividers, parks, schools, or other public lands to irrigate with reclaimed water. Priority Projects for the wastewater system include:

  - Reduce odors detected in developments adjacent to WWTP,
  - Upgrade WWTP to tertiary treatment with assistance of ORMAT, and
  - Investigate feasibility of using reclaimed water for irrigation of public lands.

- **Potable Water** – The current design capacity of the WTP is 21MGD, with an ADD of 7.8MGD. The City has recently constructed the 21MGD WTP, though the old WTP with a capacity of 16MGD is still operational. The City regards the old WTP as a standby plant to be used in case of an emergency. Current raw water storage is approximately 40MG. This provides 2.5 days (summer) to 5 days (winter) of capacity. The clear water storage is currently 10MG. An additional 5MG clear water storage tank was damaged by a recent earthquake. A 4MG replacement tank will be in place by July 2011. The City has access to an electronic model of the distribution system, which is maintained by Carollo Engineers. Carollo has not informed the City of any immediate system deficiencies. The City does not have a replacement program for older sections of the distribution system; rather, pipes are replaced as they fail. The City is currently working on a Capital Investment plan. The local mall is currently serviced from a single-source (non-looped) 20-inch pipe, and does not have fire water storage. Priority Projects for the potable water system include:

  - Complete construction of 4MG clear water storage tank, and
  - Provide the local mall with a looped water distribution system and fire water storage.

Heber Public Utility District

A telephone interview with General Manager, John Jordan, was conducted on October 28, 2010. The current state of each water system is as follows:

- **Stormwater** – The Community of Heber has a Master Drainage Plan, which was completed by Nolte in 2006. The Town defers to the Imperial County Planning and Development guidelines, and Imperial County Public Works Department with regard to stormwater facilities and their design. Currently, the Town has adequate capacity in the existing storm drain system. The Town does not have any Priority Projects for the stormwater system.

- **Wastewater** – The current design capacity of the WWTP is 0.65MGD. When the WWTP was originally constructed, it was designed to have a capacity of 0.81MGD. However, it was discovered that, due to deficiencies in the design, the actual capacity was only 0.65MGD. The average daily flow is 0.5MGD (77% of capacity). The current treatment level is primary treatment. The PUD is planning to expand the capacity to 1.2MGD of secondary treatment with UV disinfection, but is having difficulty securing funding. The project cannot be done in phases. Heber PUD is in talks with ORMAT Energy (a geothermal energy company) regarding the

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WWTP. Talks are preliminary, but ORMAT has proposed expanding and upgrading the plant to tertiary treatment in exchange for access to tertiary treated effluent. In addition to supplying ORMAT with tertiary treated effluent, it has been proposed that reclaimed water could be used for park irrigation. Priority Projects for the wastewater system include:

  - Expand/upgrade WWTP to 1.2MGD and secondary treatment w/ UV disinfection,
  - Upgrade WWTP to tertiary treatment with assistance from ORMAT, and
  - Investigate feasibility of using reclaimed water for park irrigation.

- **Potable Water** – The current design capacity of the WTP is 2.0MGD, with an ADD of 1.1MGD. Heber PUD has 5.8MG of raw water storage capacity (2.5 to 5 days of capacity), and 5.5MG of clear water storage capacity (2.5 to 5 days of capacity). Since 2004, all new developments have had an electronic model of the distribution system. Heber PUD is currently producing a Water Distribution Study for the older sections of town. This study should be completed by mid-2011. The existing distribution system consists of AC, PVC, and HDPE pipe. Heber PUD does not have a program for old pipeline replacement; rather pipes are replaced as they break. Peak demand occasionally exceeds the 2MGD capacity of the WTP (as permitted by CDPH). Phase 1 and Phase 2 of a three-Phase WTP expansion project have been completed, and Heber PUD is currently working on Phase 3. Phase 3 is expected to be completed by the end of 2011. The capacity of the WTP will be expanded to 6MGD once Phase 3 is complete. After Phase 3 of the current expansion to 6MGD is complete, the total capacity of the WTP can be further expanded up to 16MGD without a major redesign. The current expansion project (6MGD) will meet Heber PUD demands for at least the next 15 years. Priority Projects for the potable water system include:

  - Completion of Phase 3 of WTP expansion,
  - Complete Water Distribution Study for older sections of town,
  - Expand raw water storage capacity to 12MG, and
  - Investigate feasibility and benefits of constructing interties between communities that would allow for delivery of potable water in the event of an emergency or WTP shutdown.

City of Holtville

An interview with Justina Arce, a Senior Planner for The Holt Group (who provides Planning and Engineering Services for the City of Holtville) was conducted on August 18, 2010. The current state of each water system is as follows:

- **Stormwater** – The City of Holtville has adopted Imperial County standards for stormwater collection. With the exception of stormwater detention basins, and IID drains, there is no stormwater infrastructure. As such, there is no stormwater Capital Investment plan. Portions of the City, especially near the Alamo River, are subject to flooding. Standing/stagnant water is a problem in portions of the City due to a lack of drains and conveyance. Also, approximately 60% of stormwater runoff from the City flows into an industrial area due to a lack of proper drainage and conveyance systems. Major pipelines are non-existent in a number of areas within the City.

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Overall, conveyance systems in the City are inadequate. A preliminary engineering report identified the need for a large retention basin to prevent flooding. A more in depth analysis of the drainage in the City would be beneficial. Potential Projects for the stormwater system include:

- Stormwater conveyance system and retention basin improvements, and
- Development of a Stormwater Master Plan

- **Wastewater** – The current design capacity of the WWTP is 1.3MGD, with an average daily flow of 0.60 to 0.65 MGD (46% to 50% of capacity). The WWTP has secondary treatment with UV disinfection. The WWTP is currently under cease and desist orders for exceeding their NPDES permit requirements. The effluent exceeds ammonia and heavy metal concentrations, as well as pesticide concentrations due to infiltration from ag fields. A $1M grant has been awarded by the Border Environment Cooperation Commission (BECC) to the City to make WWTP improvements to become compliant with their NPDES permit. However, the City needs 50% matching funds. The City Engineer is seeking an agreement with ORMAT Energy (a geothermal energy company) in which ORMAT will assist in upgrading the WWTP to tertiary treatment in exchange for receiving a portion of the treated effluent. The City is also in discussions with IID to ascertain what level of treatment would allow the City to discharge treated effluent to the canal system. Priority Projects for the wastewater system include:

  - Upgrades to WWTP to comply with NPDES permit,
  - Wastewater collection system and retention basin improvements, and
  - Development of a Master Sewer Plan.

- **Potable Water** – The current design capacity of the WTP is 3.15MGD, with a peak day demand of 3MGD. The City has approximately 9MG of raw water storage and 3.9MG of clear water storage. An earthquake recently damaged the raw water ponds and a 1.5MG clear water storage tank. The City has begun repairs and lining three raw water ponds under a USDA grant. Currently, only one pond has been fully repaired; though all three have been lined. A 2.4 MG clear water tank was constructed earlier this year, and the former 1.5MG tank was repaired, but with a lower capacity at 1.4 MG. The distribution system is undersized and provides poor fire flow and pressure. Priority Projects for the potable water system include:

  - Complete repairs to raw water ponds, and
  - Development of a Master Water Plan.

City of Imperial

The City of Imperial was not able to be contacted or did not respond to queries.

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Niland Sanitary District and Golden State Water Company

A telephone interview with the Local Operation Superintendent for Golden State Water Company, David Godsey, was conducted on October 27, 2010. The current state of each water system is as follows:

- **Stormwater** – There is no stormwater collection system to speak of in Niland. All runoff discharges to agricultural drains administered by IID. There are no stormwater Priority Projects.

- **Wastewater** – The current design capacity of the WWTP is 0.5MGD, with an average daily flow of 0.08MGD (16% of capacity). The current level of treatment is primary; with chlorination/fluoridation ponds. The WWTP is out of compliance with their NPDES permit for consistently exceeding the allowable copper concentration. The Economic Development Department issued a grant to Niland SD help deal with infiltration issues. The liners that were placed in much of the collection system reduced infiltration quite substantially; previous (June 2009) average daily flow into the WWTP was 0.18MGD. This equates to nearly a 56% reduction in flow. Despite the improvement grant for the collection system, Niland SD may dissolve due to lack of operations funding. The area is severely disadvantaged and many residents are not paying taxes that would go to Niland SD. Priority Projects for the wastewater system include:
    - Obtain funding for operation, or have another entity take over operations,
    - If Niland SD dissolves, connect collection system to Calipatria's WWTP,
    - If Niland SD does not dissolve, upgrade WWTP to secondary treatment to meet NPDES permit requirements, and
    - Replace older sections of pipe and/or line system to prevent infiltration issues.

- **Potable Water** – See Potable Water section for the City of Calipatria

Seeley County Water District

A telephone interview with Supervisor, Anthony Munger, was conducted on October 28, 2010. The current state of each water system is as follows:

- **Stormwater** – There is little to no stormwater infrastructure in place. Several areas directly adjacent to the New River are subject to flooding. Priority Projects for the stormwater system include:
    - Flood mitigation for areas directly adjacent to the New River.

- **Wastewater** – The current design capacity of the WWTP is 0.2MGD, with an average daily flow of 0.10MGD (50% of capacity). The current level of treatment is secondary with UV disinfection. The WWTP is meeting the NPDES discharge requirements. There is no program in place for replacement of old sections of the collection system; rather pipes are replaced as they break. Seeley County Water District is currently in preliminary talks with SES Solar regarding the WWTP. SES Solar has proposed upgrading the WWTP to tertiary treatment in exchange for receiving 0.15 to 0.2MGD of treated effluent for construction and operation activities at the Solar Two facility. Priority projects for the wastewater system include:

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- Upgrading WWTP to tertiary treatment with the assistance of the SES Solar Two facility in exchange for delivering treated effluent to the facility, and
- Preventative replacement program for older sections of pipe in the collection system.

- **Potable Water** – The current design capacity of the WTP is 0.75MGD, with an ADD of 0.29MGD. The Seeley County Water District currently has 2MG of raw water storage, and 0.9MG of clear water storage. However, construction is ongoing for both raw water and clear water storage. An additional 5MG raw water tank is being constructed, while a total of 1.3MG of clear water storage will be available at the beginning of the year. The District has an electronic model of the existing distribution system. There are no system deficiencies identified by the model, though many pipes in the distribution system are old and prone to breaking. The District received a grant from the U.S. Department of Agriculture in September of 2010 for pipeline replacement, and will begin implementation in January 2011. Priority Projects for the potable water system include:
  - Implementation of pipeline replacement program using grant funds beginning January 2011,
  - Expansion and lining of existing raw water ponds is currently underway,
  - Expansion of clear water storage to 1.3MG will be complete by January 2011, and
  - Consideration of permanent emergency connections with El Centro or Naval Base.

City of Westmorland

The City of Westmorland was not able to be contacted or did not respond to queries.

County of Imperial

A telephone interview with the Director of Public Works, Bill Brunet, and the Planning Division Manager, Jim Minnick was conducted on November 1, 2010. The County oversees operations for Gateway of the Americas WWTP and WTP. The current state of each water system is as follows:

- **Stormwater** – There is very little stormwater infrastructure in Gateway of the Americas. Parking areas serve as detention basins and are designed to pond to a depth of 6 inches during storm events. These basins then infiltrate the water into the ground, or discharge to Ash Canal or the Alamo River. There is neither a Master Drainage Plan, nor a Capital Improvement Plan; facility construction is dependent upon development. Currently, the stormwater management system adequately conveys storm flows and provides adequate flood protection. No stormwater Priority Projects have been identified.

- **Wastewater** – The current design capacity of the WWTP is 0.2MGD, with an average daily flow of 0.014MGD (7% of capacity). Treatment currently entails filtration and UV disinfection. The WWTP is currently in Expansion Phase II of a 5-Phase design. Future capacity is expected to be 1.5MGD, and future treatment is expected to be activated sludge with UV disinfection. Phases 3 through 5 are dependent upon growth and funding. The 2005 Service Area Plan identifies future Capital Investments. Priority Projects for the wastewater system include:

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- Complete Expansion Phase II on the WWTP.

- **Potable Water** – The current design capacity of the WTP is 0.12MGD, with a maximum daily demand of 0.95MGD. There is 1.8MG of raw water storage and 1MG of clear water storage. The system occasionally experiences exceedance of water quality limits. The WTP is currently undergoing Phase II expansion. Priority Projects for the potable water system include:
    - Complete Phase II expansion on the WTP.

Ongoing communication with the above agencies is essential in assuring that common DAC issues and needs are incorporated into, and met by, the Imperial IRWM Plan. The above agencies will be contacted periodically to update the Infrastructure Matrix to reflect facility and distribution/collection system changes.

Common Themes amongst Communities

A. Stormwater Issues

a. Currently, communities located near either the Alamo or New River discharge directly to the river. The runoff from other communities is directed to detention basins which discharge to drains maintained by IID. While there is a county ordinance requiring these detention basins to empty the 100-year storm within 72 hours, the basins rarely drain in the allotted time. This is due to a combination of factors, including poor percolation of the soils, a high water table, and insufficient capacity in the IID drains.

b. Another issue with the current state of drainage in many of the communities is that agricultural drainage passes through a community on the way to a drain or one of the rivers.

c. There is no county-wide flood control district, no benefits assessment zones to provide a revenue source, and no regional master plan for drainage.

B. Wastewater Issues

a. All communities interviewed expressed a desire to replace the older portions of their wastewater collection systems.

b. Due to the high water table in most of the Region, infiltration is a concern.

c. The current level of treatment for many WWTPs in the Region is primary or secondary. Due to this, many WWTPs exceed their NPDES discharge requirements.

d. The Region, as a whole, is economically depressed, and as such, the individual communities do not have the funds to develop updated master sewer plans, subsidize pipeline replacement programs, or upgrade their respective WWTPs.

e. Many communities are in talks with energy companies in the area. The general thrust of these discussions is that the energy company is willing to pay for upgrading the local

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WWTP to tertiary treatment in exchange for access to the treated effluent for facility operations.

C. Domestic Water Issues

a. Very few communities have the raw water and clear water reserve capacity suggested by the State Public Health Department in the event of an emergency; 3 to 5 days. This includes alternate sources of raw and potable water.

b. Old pipes are replaced as they break, causing shortages at inconvenient times. Many of the zone control valves are old as well, and do not function properly. This causes system maintenance to affect a larger area and a greater number of people than desired.

Potential Regional Projects that Address Common Needs

A. Stormwater Projects – Once the Imperial IRWM Plan has been adopted, the Region will be eligible to apply for Proposition 1E grant funding. Prop 1E funds are granted for a variety of flood protection improvement and flood management projects. The Region would apply for funding of their stormwater planning and stormwater facility projects under Prop 1E.

a. The creation of a Regional Flood Control District was discussed by a number of communities; especially those communities locate on/near the Alamo or New River.

b. A regional storm drain facility capable of conveying the 100-year storm, as well as agricultural drainage, without the need for detention basins would allow for a more efficient use of land in the Region

B. Wastewater Projects – In addition to Prop 1E grants, the Region will be eligible for Proposition 84 grant funding. Prop 84 has two distinct areas of funding; Planning and Implementation. Prop 84 Planning grants fund the development of regional planning documents (Master Water Plans, Master Sewer Plans, IRWMPs, etc), while Prop 84 Implementation grants fund the implementation (design, construction, etc.) of water reliability and water quality projects within the IRWM Plan. The Region could apply for funding of their wastewater and domestic water planning and implementation projects under Prop 84.

a. A fund or program for lining or replacing older portions of the wastewater collection systems **in each community and city**.

c. Upgrade the WWTPs in each community with secondary or tertiary treatment. If not economically feasible, consider a regional WWTP. Define economic incentives to support upgrades by energy industry through a cooperative program. Develop strategies to allow for crediting wastewater created through use of this water in-lieu of Colorado River supplies.

d. Create a **regional** engineering and/or an operation and maintenance fund for collection system pipe replacement.

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C. Domestic Water Projects – See Above.

a. Create interconnections between adjacent communities to allow for delivery of potable water in the event of an emergency or treatment plant shutdown.

b. Create a regional engineering and/or an operation and maintenance fund for distribution system pipe replacement.

Funding

The following funding sources have been utilized for a number of infrastructure improvement projects in the Region:

- **Clean Water State Revolving Fund (CWSRF)**

  The purpose of the CWSRF is to implement the Federal Clean Water Act and various State water quality laws by providing financial assistance for construction or implementation of projects that address water quality problems and to prevent pollution of the waters of the State.

  The CWSRF Program provides low-interest loans and other financing mechanisms for construction of publicly-owned wastewater treatment facilities, local sewers, sewer interceptors, water recycling facilities, storm water treatment facilities, as well as, expanded use projects such as implementation of nonpoint source (NPS) projects or programs, and development and implementation of estuary Comprehensive Conservation and Management Plans (CCMPs). While there are no specific funds directed toward DAC projects, or IRWMP projects, the types of projects that will likely be included in the Imperial IRWMP are a perfect fit for the types of projects funded by the CWSRF.

  An example of CWSRF utilization in the Region is that of the City of Brawley, who received $24,595,000 to expand their Wastewater Treatment Facility.

- **California Department of Public Health Safe Drinking Water State Revolving Fund (SDWSRF)**

  The purpose of the SDWSRF is to provide low cost loans and grants, and to provide other types of assistance to water systems to achieve or maintain compliance with the Safe Drinking Water Act (SDWF) requirements. The SDWSRF Program supports the US EPA National Strategic Plan, whose goals include:

  - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide health habitat for fish, plants, and wildlife.
  - Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.
  - By 2014, 93 percent of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.

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There are numerous examples of SDWSRF utilization in the Region. A few of these SDWSRF Projects are explained below:

- City Of Brawley – Citywide replacement of aged water distribution system. Redesign and improvement of the system to lessen the possibility of service interruption.
  Cost of Project - $12,500,000.
- City of Calexico – Upgrade of the existing Water Treatment Plant. Replacement of functional but obsolete equipment and structures.
  Cost of Project - $10,000,000.
- City of Holtville – Annexation of service area. A number of residences are served by raw, unfiltered canal water which does not meet coliform standards. By annexing the residences into the service area, they could be serviced from the Holtville WTP.
  Cost of Project - $2,537,948.

- **Proposition 1E, Disaster Preparedness and Flood Protection Bond Act of 2006**

  The purpose of Proposition 1E is to pay for levee repairs and improvements, upgrade flood protection for urban areas, improve emergency response capabilities, and provide grants for stormwater flood management projects.

- **Proposition 84, Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Act of 2006**

  The purpose of Proposition 84 is to provide planning and implementation funding for the Integrated Regional Water Management Plan grant program and associated projects. The aim of the IRWMP Program is to secure long-term water supply reliability within California by pursuing projects that yield multiple benefits for water supplies, water quality, and natural resources.

Next Steps

- Coordinate a DAC Workshop to discuss funding opportunities, review needs, coordinate discussion of regional solutions (projects, programs, and policies) for inclusion in the IRWMP, and coordinate project priorities for the Proposition 84 Implementation Grant.
- Conduct a Preliminary Call for Projects in the first quarter of 2011 to identify projects to include in the IRWMP and potentially include in a Proposition 84 grant application.

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References

City of Brawley, Final General Plan Update, 2030, September 2008

City of Brawley, 2005 Urban Water Management Plan, December 2005

City of Calexico, General Plan, Service Area Plan, June 2006

City of Calexico, Service Area Plan, May 2006

City of Calexico, 2007 Urban Water Management Plan, March 2007

City of Calexico, Water Master Plan, July 2003

City of Calipatria, Final Calipatria Service Area Plan (CL1-04), November 2004

City of El Centro, General Plan, February 2004

City of El Centro, Service Area Plan, November 2005

City of El Centro, 2005 Urban Water Management Plan, March 2006

City of Holtville, Service Area Plan / Municipal Service Review, October 2006

City of Imperial, General Plan, December 1992

City of Imperial, 2005 Urban Water Management Plan, December 2005

City of Westmorland, Service Area Plan, October 2004

County of Imperial, General plan

Heber Public Utility District, Wastewater Treatment Plant Expansion, Updated Preliminary Engineering Report, May 2008

Seeley CWD, Seeley Wastewater Reclamation Facility Improvements, March 2010

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Brawley Potable Water Inventory

			Known Conditions	Updated Conditions
		Location	City of Brawley	City of Brawley
		Interviewee:		Yazmin Arellano/Gordan Gaste
	Questions:	Date of Interview:		9/3/2010
1	What is your primary role?			Public Works Director/Planning Director
2	Data current as of?		2006	9/3/2010
	Current treatment capacity is XXMGD?		15MGD	15MGD
	Current raw water storage capacity?		0.25MG + 3.00MG + ??MG reservoir	35 MG
	Current raw water pump station capacity?			
	Current clear water storage capacity?		9MGD	9 MGD
	Current clear water pump station capacity?		16875gpm	22,5000 gpm, have another smaller facility 4,800 gpms
3	Current Average Daily Demand (ADD)?		8.4MGD	8.4 MGD
	Current Maximum Day Demand? at Peak Hour?		12.6MGD (MDD); 23400gpm(PHD)	same
4	Do you have a model of the existing distribution system?		(Implied but not stated - SAP Pg. 4-63)	NO
	Current system deficiencies (low pressure/low flow/WQ)?		Lower reliability due to reduced capacity in CI pipes (~39% of system)	Plus need more raw water storage and eliminatation of bottlenecks within the system to balance system pressue
	Types of pipe in system		Cast Iron(~39%), Asbestos Cement(~41%), PVC(~20%)	same
	Program for replacing old/damaged pipe reaches?		1999 Water Master Plan	Programs identified in the Master Plan have not been implemented as a result of lack money
5	Future treatment capacity is XXMGD?		30MGD	
	Future raw water storage capacity?		8.8MG	52 MG
	Future raw water pump station capacity?			2,8000 GPM
	Future clear water storage capacity?		15.0MG	
	Future clear water pump station capacity?			45,000 GPM
6	Future Average Daily Demand (ADD)?		16MGD	
	Future Maximum Day Demand? at Peak Hour?		24MGD(MDD); 44400gpm(PHD)	
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Yes. See 1999 Water Master Plan, Brawley SAP - Page 4-64 and 4-67, and/or Development Impact Fee (DIF) Study	Current Master Plan is outdated, and the City will be advertising soon to update the Master Plan in the form of an IRP including WW, DW, and SW facilities.
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		Phased: PhI - 1999-2009, PhII - 2010-2014, PhIII - 2015-2019, PhIV - 2020-2024, and as development occurs	20 yrs.
8	What is your planning horizon?		2025	2030
9	Mitigation procedure for drought/low supply conditions?			none
10	Plan in the event of a disaster/emergency?			no
	Other Notes			2005 UWMP completed, 2010 UWMP has been submitted and was completed by Dynamic Engineering. No Emergency Response Plan Exists; currently have 4-day supply. No Interconnections or redundencies exist within system. Priority Projects Identified - 1) 86th St. Water Line Replacement Project 2) Expand raw water storage capacity/add water pump at water plant 3) Andrata Place Area Improvement Project 4) Additional Water Reservoir and Pumping Station 5) Main St. Water Line Replacement

Brawley Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of Brawley	City of Brawley
		Interviewee:		Yazmin Arellano/Gordan Gaste
		Date of Interview:		September 3,2010
1	What is your primary role?			Public Works Director/ Planning Director
2	What are your land use policies as they relate to flood control?		Discourage development in the New River flood channel (Open Space designation).	
3	Is there a plan that identifies future capital investments for stormwater?			CIP, and eventually the SW section of the newly developed IRP
4	Do you have a Master Drainage/Stormwater Plan?		No.	No
5	Do you have design criteria pertaining to stormwater management facilities?		Yes	Yes
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		Detention basins - 100-yr/24hr storm.	Detention basins - 100-yr/24hr storm.
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			No
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		No.	No, various sections of the City are prone to flooding as a result of an inadequate sewer system.
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Multiple facilities subject to minor, shallow flooding and ponding.	Various sections of the City where CSO exists - approx. 50 percent of the system
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As new development occurs.	As funds become available
9	Do you have any combined stormwater/sewer (CSO) facilities?		Yes, approximately half of the City's drainage system.	Yes- approx. 50 percent of the system
	Do you have any plans to separate them?		Yes	Yes
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			No
	Are soil conditions such that infiltration or recharge is practical?			There are a few areas in the southeast part of town sandy soils about 25% of that area demonstrates good percolation
12	What are the biggest constraints to stormwater conveyance?		Flat land, intense storm events, and low infiltration rates.	1) Funding, and 2) new regulations i.e. MS4 Permit requirements. The City is not at a point where they can meet effluent limitations.
Other Notes				Would like to apply for Flood Management Grants to improve stormwater systems Priority Projects 1) Separation of CSO 2) Master Drainage Plan

Brawley Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	City of Brawley WWTP	City of Brawley WWTP (2010)
		Interviewee:	Ruben Mireles	Yazmin Arellano/Gordan Gaste
	Questions:	Date of Interview:	June 16, 2009	September 3, 2010
1	What is your primary role?		Operations Division Manager	Public Works Director/Planning Director
2	Size of WWTP		5.9	5.9
	Any capacity issues; how close are you to the use of the design capacity?		No, Currently at 4.0 MGD	Currently at 80 percent capacity
	Are you under any compliance requirements?		Yes, Cease and Desist Order from the Cal Regional Water Quality Control Board.	Yes, still under cease and desist order, however, they are in the process of upgrading plant to fullfil requirement set forth by RWQCE
3	What were total and monthly annual total flows from the plant in 2008?		1460 million/year and 4.0 MGD.	same
4	What is your level of treatment?		Primary (Plans to upgrade to secondary in a year)	Secondary
	Any land disposal or reuse?		No	same
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		Maybe consider after planned treatment level improvements, depending on city growth. No need anticipated in near future.	No estimate available, but agreements are in place with ORMAT for future service
6	What level of treatment and treatment process are anticipated?		Improvements will consist of Secondary Treatment using wave oxidation process, and eventually to reclaim.	Secondary treatment
7	What is your planning horizon?		Enable treatment facility to meet all the 2010 permit requirements, 2010 NPDES Permit is a five year permit	2030
8	Is there a plan that identifies what future capital investments would be for the plant?		Yes - 25 to 30 million within the next 3 years. Funds already committed? Yes – Prelim funding agreement will be signing by city soon.	Currently the Capital Improvement Plan identifies needs, however this should be updated by June 2011- WW Section of IRP.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		Less than one year	Whenever there is a need. Currently, the City has a deficit of funds.
9	Any plans for reuse?		Yes – Ormat has approached the city for reclaimed use for cooling tower purposes – they are planning to duplicate their facility/ have another facility close by. Have start negotiations with city. Prelim design report on reclaimed water structures has been started. Had other interest as well - Caltrans has expressed some interest too. Golf course south of them. Ethanol plant nearby going up – express interest	No. There are no golf courses around as they have all gone bankrupt. No current need, and future need will depend upon growth and potential agreements with ORMAT
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		Yes, Industrial (see above).	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		Very good	very good- if funding is available
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		Environmental –CEQA process, have to look at impacts to River	
	What are the biggest constraints to reuse?		Environmental and long term agreements	
Other Notes				Upgrades to secondary treatment will be complete by December 2010; Funds for upgrade were derived from SRF Funds and $10M from ARRA; Continuing discussions with ORMAT - Potential need to upgrade to tertiary treatment Priority Projects Identified 1) Rehabilitation Station - Wet well and pump - $500k 2) Expansion of WWTP Capacity - $27M (currently at 80% capacity)

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	City of Calexico	City of Calexico
		Interviewee:		
		Date of Interview:		
1	What is your primary role?			
2	Data current as of?			
	Current treatment capacity is XXMGD?			
	Current raw water storage capacity?			
	Current raw water pump station capacity?			
	Current clear water storage capacity?			
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			
	When do you anticipate making upgrades/improvements,			
8	What is your planning horizon?			
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
Other Notes				

Stormwater Inventory

			Known Conditions	Updated Conditions
		Plant:	City of Calexico	City of Calexico
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?			
4	Do you have a Master Drainage/Stormwater Plan?			
5	Do you have design criteria pertaining to stormwater management facilities?			
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
9	Do you have any combined stormwater/sewer (CSO) facilities?			
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is			
12	What are the biggest constraints to stormwater			
	Other Notes			

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	City of Calexico	City of Calexico
	Interviewee:		
Questions:	Date of Interview:		
1	What is your primary role?		
2	Size of WWTP		
	Any capacity issues; how close are you to the use of the design capacity?		
	Are you under any compliance requirements?		
3	What were total and monthly annual total flows from the plant in 2008?		
4	What is your level of treatment?		
	Any land disposal or reuse?		
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		
6	What level of treatment and treatment process are anticipated?		
7	What is your planning horizon?		
8	Is there a plan that identifies what future capital investments would be for the plant?		
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		
9	Any plans for reuse?		
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		
	What are the biggest constraints to reuse?		
Other Notes			

Potable Water Inventory

			Known Conditions	Updated Conditions
		Location	Calipatria-Niland-Prison	Calipatria-Niland-Prison
		Interviewee:		David Godsey
	Questions:	Date of Interview:		
1	What is your primary role?			Local Operations Superintendent
2	Data current as of?		Treatment - 2006; Demand - 2005	10/27/2010
	Current treatment capacity is XXMGD?		6MGD	6MGD
	Current raw water storage capacity?		9.0MG	9MG
	Current raw water pump station capacity?		3500GPM	3500 GPM
	Current clear water storage capacity?		4.0MG	3-5 day max
	Current clear water pump station capacity?		5500gpm	
3	Current Average Daily Demand (ADD)?		2.5MGD	
	Current Maximum Day Demand? at Peak Hour?		3.3MGD(MDD); 4000gpm(PHD)	
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			No Issues
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			Maintenance program
5	Future treatment capacity is XXMGD?		8.0MGD	
	Future raw water storage capacity?		9.0MG	
	Future raw water pump station capacity?			
	Future clear water storage capacity?		4.0MG	8MG
	Future clear water pump station capacity?		5500gpm	
6	Future Average Daily Demand (ADD)?		3.6MGD	
	Future Maximum Day Demand? at Peak Hour?		4.7MGD(MDD); 6000gpm(PHD)	
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			Fire testing by CH2MHill
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			Emergency Response Plan
	When do you anticipate making upgrades/improvements,			
8	What is your planning horizon?		2025	
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
	Other Notes		Owned, operated, and funded by Southern California Water Company. Will serve Calipatria and Niland	Engaging in THM mitigation due to tank and pipeline arrangement. City is at the far end of the system. Scada system may help with THM as there is more control with how/where water is distributed. Funding not really available due to the fact that Golden State Water (private company) owns the distribution and treatment facilities.

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of Calipatria	City of Calipatria
		Interviewee:		Justina Arce
		Date of Interview:		
1	What is your primary role?			Senior Planner for the Holt Group
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon future construction.	
4	Do you have a Master Drainage/Stormwater Plan?		Yes.	
5	Do you have design criteria pertaining to stormwater management facilities?		No.	
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Adequate for light rainfall events, but inadequate for 25-year storm event.	
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Numerous areas of puddling, ponding, and inundation of low lying areas.	
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs.	
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		Retention basins expected to infiltrate water into ground.	
	Are soil conditions such that infiltration or recharge is		Yes.	
12	What are the biggest constraints to stormwater conveyance?		Many paved street sections w/in the City have been constructed w/out consisten design parameters. Curb, gutter, cross gutter, storm drains, channels, and swales are either non-existant or ineffectively applied.	
Other Notes				
				Develop Stormwater Management Plan

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
Questions:	Plant:	City of Calipatria	City of Calipatria
	Interviewee:	Ruben Mireles	Justina Arce
	Date of Interview:	June 16, 2009	August 18, 2010
1	What is your primary role?	Chief Plant Operatory - oversee operation requirements as well as correspondence on the administrative side.	Senior Planner for the Holt Group
2	Size of WWTP	1.73	1.73
	Any capacity issues; how close are you to the use of the design capacity?	No issues had been 1 MGD for 3 or 4 years. Most comes wastewater treated at the plant comes from Calipatria state prison and the prison recently installed a lot of water reducing devices (toilets, shower heads, etc) so since (about 5-6 most recent months) average flow has been about 0.75 MGD.	
	Are you under any compliance requirements?	Cyanide problem in past – investigated, concluded laboratory error. For last two years have been in compliance but region board wants prelim design for upgrading to secondary treatment with eventual reclamation – currently working on prelim design report	
3	What were total and monthly annual total flows from the plant in 2008?	1 MGD for 2008 and for few years prior last 5 to 6 months dropped to 0.75 MGD and expected to stay at this level (see #2 response)	
4	What is your level of treatment?	Primary – starting prelim design for upgraded to secondary.	
	Any land disposal or reuse?	No	
5	What is the anticipated need and planned future design	None at this time.	
6	What level of treatment and treatment process are	Secondary	
7	What is your planning horizon?	Dependant on prelim designed report and funding opportunities.	
8	Is there a plan that identifies what future capital	No funding identified or committed yet.	
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Probably within 3-5 years for upgraded to secondary treatment.	
9	Any plans for reuse?	There has been discussion to consider reclamation.	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Not that aware of – City manager may be aware of something. There had been some talk with an Ethanol plant at one point.	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Could be either for Ag use or possibly industrial.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	Environmental but because discharge to drain there may be less impact or considerations needed...	
	What are the biggest constraints to reuse?		
Other Notes			Priority Projects include: Wastewater collection system replacement throughout the city. Development of a Wastewater Management Plan

Brawley Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of Brawley	City of Brawley
		Interviewee:		Yazmin Arellano/Gordan Gaste
		Date of Interview:		September 3,2010
1	What is your primary role?			Public Works Director/ Planning Director
2	What are your land use policies as they relate to flood control?		Discourage development in the New River flood channel (Open Space designation).	
3	Is there a plan that identifies future capital investments for stormwater?			CIP, and eventually the SW section of the newly developed IRP
4	Do you have a Master Drainage/Stormwater Plan?		No.	No
5	Do you have design criteria pertaining to stormwater management facilities?		Yes	Yes
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		Detention basins - 100-yr/24hr storm.	Detention basins - 100-yr/24hr storm.
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			No
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		No.	No, various sections of the City are prone to flooding as a result of an inadequate sewer system.
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Multiple facilities subject to minor, shallow flooding and ponding.	Various sections of the City where CSO exists - approx. 50 percent of the system
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As new development occurs.	As funds become available
9	Do you have any combined stormwater/sewer (CSO) facilities?		Yes, approximately half of the City's drainage system.	Yes- approx. 50 percent of the system
	Do you have any plans to separate them?		Yes	Yes
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			No
	Are soil conditions such that infiltration or recharge is practical?			There are a few areas in the southeast part of town sandy soils about 25% of that area demonstrates good percolation
12	What are the biggest constraints to stormwater conveyance?		Flat land, intense storm events, and low infiltration rates.	1) Funding, and 2) new regulations i.e. MS4 Permit requirements. The City is not at a point where they can meet effluent limitations.
Other Notes				Would like to apply for Flood Management Grants to improve stormwater systems Priority Projects 1) Separation of CSO 2) Master Drainage Plan

Brawley Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	City of Brawley WWTP	City of Brawley WWTP (2010)
		Interviewee:	Ruben Mireles	Yazmin Arellano/Gordan Gaste
	Questions:	Date of Interview:	June 16, 2009	September 3, 2010
1	What is your primary role?		Operations Division Manager	Public Works Director/Planning Director
2	Size of WWTP		5.9	5.9
	Any capacity issues; how close are you to the use of the design capacity?		No, Currently at 4.0 MGD	Currently at 80 percent capacity
	Are you under any compliance requirements?		Yes, Cease and Desist Order from the Cal Regional Water Quality Control Board.	Yes, still under cease and desist order, however, they are in the process of upgrading plant to fullfil requirement set forth by RWQCE
3	What were total and monthly annual total flows from the plant in 2008?		1460 million/year and 4.0 MGD.	same
4	What is your level of treatment?		Primary (Plans to upgrade to secondary in a year)	Secondary
	Any land disposal or reuse?		No	same
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		Maybe consider after planned treatment level improvements, depending on city growth. No need anticipated in near future.	No estimate available, but agreements are in place with ORMAT for future service
6	What level of treatment and treatment process are anticipated?		Improvements will consist of Secondary Treatment using wave oxidation process, and eventually to reclaim.	Secondary treatment
7	What is your planning horizon?		Enable treatment facility to meet all the 2010 permit requirements, 2010 NPDES Permit is a five year permit	2030
8	Is there a plan that identifies what future capital investments would be for the plant?		Yes - 25 to 30 million within the next 3 years. Funds already committed? Yes – Prelim funding agreement will be signing by city soon.	Currently the Capital Improvement Plan identifies needs, however this should be updated by June 2011- WW Section of IRP.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		Less than one year	Whenever there is a need. Currently, the City has a deficit of funds.
9	Any plans for reuse?		Yes – Ormat has approached the city for reclaimed use for cooling tower purposes – they are planning to duplicate their facility/ have another facility close by. Have start negotiations with city. Prelim design report on reclaimed water structures has been started. Had other interest as well - Caltrans has expressed some interest too. Golf course south of them. Ethanol plant nearby going up – express interest	No. There are no golf courses around as they have all gone bankrupt. No current need, and future need will depend upon growth and potential agreements with ORMAT
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		Yes, Industrial (see above).	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		Very good	very good- if funding is available
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		Environmental –CEQA process, have to look at impacts to River	
	What are the biggest constraints to reuse?		Environmental and long term agreements	
Other Notes				Upgrades to secondary treatment will be complete by December 2010; Funds for upgrade were derived from SRF Funds and $10M from ARRA; Continuing discussions with ORMAT - Potential need to upgrade to tertiary treatment Priority Projects Identified 1) Rehabilitation Station - Wet well and pump - $500k 2) Expansion of WWTP Capacity - $27M (currently at 80% capacity)

Brawley Potable Water Inventory

			Known Conditions	Updated Conditions
		Location	City of Brawley	City of Brawley
		Interviewee:		Yazmin Arellano/Gordan Gaste
	Questions:	Date of Interview:		9/3/2010
1	What is your primary role?			Public Works Director/Planning Director
2	Data current as of?		2006	9/3/2010
	Current treatment capacity is XXMGD?		15MGD	15MGD
	Current raw water storage capacity?		0.25MG + 3.00MG + ??MG reservoir	35 MG
	Current raw water pump station capacity?			
	Current clear water storage capacity?		9MGD	9 MGD
	Current clear water pump station capacity?		16875gpm	22,5000 gpm, have another smaller facility 4,800 gpms
3	Current Average Daily Demand (ADD)?		8.4MGD	8.4 MGD
	Current Maximum Day Demand? at Peak Hour?		12.6MGD (MDD); 23400gpm(PHD)	same
4	Do you have a model of the existing distribution system?		(Implied but not stated - SAP Pg. 4-63)	NO
	Current system deficiencies (low pressure/low flow/WQ)?		Lower reliability due to reduced capacity in CI pipes (~39% of system)	Plus need more raw water storage and eliminatation of bottlenecks within the system to balance system pressue
	Types of pipe in system		Cast Iron(~39%), Asbestos Cement(~41%), PVC(~20%)	same
	Program for replacing old/damaged pipe reaches?		1999 Water Master Plan	Programs identified in the Master Plan have not been implemented as a result of lack money
5	Future treatment capacity is XXMGD?		30MGD	
	Future raw water storage capacity?		8.8MG	52 MG
	Future raw water pump station capacity?			2,8000 GPM
	Future clear water storage capacity?		15.0MG	
	Future clear water pump station capacity?			45,000 GPM
6	Future Average Daily Demand (ADD)?		16MGD	
	Future Maximum Day Demand? at Peak Hour?		24MGD(MDD); 44400gpm(PHD)	
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Yes. See 1999 Water Master Plan, Brawley SAP - Page 4-64 and 4-67, and/or Development Impact Fee (DIF) Study	Current Master Plan is outdated, and the City will be advertising soon to update the Master Plan in the form of an IRP including WW, DW, and SW facilities.
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		Phased: PhI - 1999-2009, PhII - 2010-2014, PhIII - 2015-2019, PhIV - 2020-2024, and as development occurs	20 yrs.
8	What is your planning horizon?		2025	2030
9	Mitigation procedure for drought/low supply conditions?			none
10	Plan in the event of a disaster/emergency?			no
	Other Notes			2005 UWMP completed, 2010 UWMP has been submitted and was completed by Dynamic Engineering. No Emergency Response Plan Exists; currently have 4-day supply. No Interconnections or redundencies exist within system. Priority Projects Identified - 1) 86th St. Water Line Replacement Project 2) Expand raw water storage capacity/add water pump at water plant 3) Andrata Place Area Improvement Project 4) Additional Water Reservoir and Pumping Station 5) Main St. Water Line Replacement

Stormwater Inventory

			Known Conditions	Updated Conditions
		Plant:	City of Calexico	City of Calexico
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?			
4	Do you have a Master Drainage/Stormwater Plan?			
5	Do you have design criteria pertaining to stormwater management facilities?			
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
9	Do you have any combined stormwater/sewer (CSO) facilities?			
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is			
12	What are the biggest constraints to stormwater			
	Other Notes			

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	City of Calexico	City of Calexico
	Interviewee:		
Questions:	Date of Interview:		
1	What is your primary role?		
2	Size of WWTP		
	Any capacity issues; how close are you to the use of the design capacity?		
	Are you under any compliance requirements?		
3	What were total and monthly annual total flows from the plant in 2008?		
4	What is your level of treatment?		
	Any land disposal or reuse?		
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		
6	What level of treatment and treatment process are anticipated?		
7	What is your planning horizon?		
8	Is there a plan that identifies what future capital investments would be for the plant?		
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		
9	Any plans for reuse?		
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		
	What are the biggest constraints to reuse?		
Other Notes			

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	City of Calexico	City of Calexico
		Interviewee:		
		Date of Interview:		
1	What is your primary role?			
2	Data current as of?			
	Current treatment capacity is XXMGD?			
	Current raw water storage capacity?			
	Current raw water pump station capacity?			
	Current clear water storage capacity?			
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			
	When do you anticipate making upgrades/improvements,			
8	What is your planning horizon?			
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
Other Notes				

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of Calipatria	City of Calipatria
		Interviewee:		Justina Arce
		Date of Interview:		
1	What is your primary role?			Senior Planner for the Holt Group
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon future construction.	
4	Do you have a Master Drainage/Stormwater Plan?		Yes.	
5	Do you have design criteria pertaining to stormwater management facilities?		No.	
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Adequate for light rainfall events, but inadequate for 25-year storm event.	
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Numerous areas of puddling, ponding, and inundation of low lying areas.	
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs.	
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		Retention basins expected to infiltrate water into ground.	
	Are soil conditions such that infiltration or recharge is		Yes.	
12	What are the biggest constraints to stormwater conveyance?		Many paved street sections w/in the City have been constructed w/out consisten design parameters. Curb, gutter, cross gutter, storm drains, channels, and swales are either non-existant or ineffectively applied.	
Other Notes				
				Develop Stormwater Management Plan

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
Questions:	Plant:	City of Calipatria	City of Calipatria
	Interviewee:	Ruben Mireles	Justina Arce
	Date of Interview:	June 16, 2009	August 18, 2010
1	What is your primary role?	Chief Plant Operatory - oversee operation requirements as well as correspondence on the administrative side.	Senior Planner for the Holt Group
2	Size of WWTP	1.73	1.73
	Any capacity issues; how close are you to the use of the design capacity?	No issues had been 1 MGD for 3 or 4 years. Most comes wastewater treated at the plant comes from Calipatria state prison and the prison recently installed a lot of water reducing devices (toilets, shower heads, etc) so since (about 5-6 most recent months) average flow has been about 0.75 MGD.	
	Are you under any compliance requirements?	Cyanide problem in past – investigated, concluded laboratory error. For last two years have been in compliance but region board wants prelim design for upgrading to secondary treatment with eventual reclamation – currently working on prelim design report	
3	What were total and monthly annual total flows from the plant in 2008?	1 MGD for 2008 and for few years prior last 5 to 6 months dropped to 0.75 MGD and expected to stay at this level (see #2 response)	
4	What is your level of treatment?	Primary – starting prelim design for upgraded to secondary.	
	Any land disposal or reuse?	No	
5	What is the anticipated need and planned future design	None at this time.	
6	What level of treatment and treatment process are	Secondary	
7	What is your planning horizon?	Dependant on prelim designed report and funding opportunities.	
8	Is there a plan that identifies what future capital	No funding identified or committed yet.	
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Probably within 3-5 years for upgraded to secondary treatment.	
9	Any plans for reuse?	There has been discussion to consider reclamation.	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Not that aware of – City manager may be aware of something. There had been some talk with an Ethanol plant at one point.	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Could be either for Ag use or possibly industrial.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	Environmental but because discharge to drain there may be less impact or considerations needed...	
	What are the biggest constraints to reuse?		
Other Notes			Priority Projects include: Wastewater collection system replacement throughout the city. Development of a Wastewater Management Plan

Potable Water Inventory

			Known Conditions	Updated Conditions
		Location	Calipatria-Niland-Prison	Calipatria-Niland-Prison
		Interviewee:		David Godsey
	Questions:	Date of Interview:		
1	What is your primary role?			Local Operations Superintendent
2	Data current as of?		Treatment - 2006; Demand - 2005	10/27/2010
	Current treatment capacity is XXMGD?		6MGD	6MGD
	Current raw water storage capacity?		9.0MG	9MG
	Current raw water pump station capacity?		3500GPM	3500 GPM
	Current clear water storage capacity?		4.0MG	3-5 day max
	Current clear water pump station capacity?		5500gpm	
3	Current Average Daily Demand (ADD)?		2.5MGD	
	Current Maximum Day Demand? at Peak Hour?		3.3MGD(MDD); 4000gpm(PHD)	
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			No Issues
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			Maintenance program
5	Future treatment capacity is XXMGD?		8.0MGD	
	Future raw water storage capacity?		9.0MG	
	Future raw water pump station capacity?			
	Future clear water storage capacity?		4.0MG	8MG
	Future clear water pump station capacity?		5500gpm	
6	Future Average Daily Demand (ADD)?		3.6MGD	
	Future Maximum Day Demand? at Peak Hour?		4.7MGD(MDD); 6000gpm(PHD)	
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			Fire testing by CH2MHill
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			Emergency Response Plan
	When do you anticipate making upgrades/improvements,			
8	What is your planning horizon?		2025	
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
	Other Notes		Owned, operated, and funded by Southern California Water Company. Will serve Calipatria and Niland	Engaging in THM mitigation due to tank and pipeline arrangement. City is at the far end of the system. Scada system may help with THM as there is more control with how/where water is distributed. Funding not really available due to the fact that Golden State Water (private company) owns the distribution and treatment facilities.

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of El Centro	City of El Centro
		Interviewee:		Terry Hagen/Norma Villacana/Randy Hines
		Date of Interview:		
1	What is your primary role?			City Engineer/ Planning and Zoning Director/ Plant Supervisor
2	What are your land use policies as they relate to flood			Based on Density
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction.	Yes, currently being developed
4	Do you have a Master Drainage/Stormwater Plan?		No	Draft is complete, but no funding available.
5	Do you have design criteria pertaining to stormwater management facilities?		No.	Retention basin standards: 100yr storm contained and discharged to IID drains over 3 days. General rule is 1ac@4in deep for every 16 acres of development. No collection criteria. Operate under general CA water law
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			Carollo hired a sub-consultant o do hydrological study.
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			Absolutely not
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			Identified in Master Plan. Staff will send to GEI.
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs.	When funds are available.
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned	No. Infiltration causes problems at WW plant. Not a stormwater problem. Water table is at ~8ft
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		None mentioned	Currently capture and discharge to IID drains. Would need to evaluate based on economics
	Are soil conditions such that infiltration or recharge is practical?			No. Soil conditions are not condusive to infiltration. Mostly clays with high water table.
12	What are the biggest constraints to stormwater			Funds
Other Notes				To implement Master Plan, would need ~$200M for stormwater portion. There is lots of surface drainage. Quite a bit of the flooding is caused by ag land. A regional stormwater management facility is a high priority w/IID. Regional facility would push MP requirement off 15-20 years.

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	El Centro Municipal WWTP	El Centro Municipal WWTP
	Interviewee:	Randy Hines	Terry Hagen/Norma Villacana/Randy Hines
Questions:	Date of Interview:	June 18, 2009	October 27, 2010
1	What is your primary role?	Plant Supervisor	City Engineer/ Planning and Zoning Director/ Plant Supervisor
2	Size of WWTP	8	8
	Any capacity issues; how close are you to the use of the	No issues at this time, using about 3.6 MGD.	No capacity issues
	Are you under any compliance requirements?	Yes and no – Have some compliance issues with selenium and are expecting the board to issue cease and desist or time schedule order that will force them to take action.	No major or consistent problems. Occasionally out of compliance. General operational constraints
3	What were total and monthly annual total flows from	Would say 3.6 MGD average for 2008.	3.6MGD average
4	What is your level of treatment?	Secondary with UV disinfection	Secondary w/ UV disinfection
	Any land disposal or reuse?	No	Nn
5	What is the anticipated need and planned future design	None at this time.	None
6	What level of treatment and treatment process are anticipated?	No change planned at this time, have had few people approaching to increase – no plans on the table.	Looking to update for odor control for the existing plant
7	What is your planning horizon?	Lock planning into 5 year increments, current one to 2011 or 2012.	Same
8	Is there a plan that identifies what future capital investments would be for the plant?	Have a 5 year capital improvement plan which they will be taking to council at the end of the summer. No money committed yet.	Capital Improvement funding would be needed to update collection and plant upgrades for odor control. Completed, but not currently approved. No specific date anticipated.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Most is repairs to existing pipeline and collection system. Little identified for plant and what is maintenance.	Upgrades to collection or WWTP dependent upon development impact fees, infrastructure and reimbursement agreements.
9	Any plans for reuse?	There has been some discussion in the City internally but no push.	Have been in talks with ORMAT to make improvements to upgrade to tertiary so effluent can be delivered to ORMAT. Just in talks currently. Timeline on ORMAT project is 36 mo. Other ideas involve running purple pipe to highway dividers, parks, schools, and or solar farms
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Have had interest expresses by geothermal plants. Irrigation also an options	Geothermal, public land irrigation, solar farms
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Don't see until raw water comes up in costs. Can't compete.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	No, believe and understand it will be easier than complying with permit.	Title 22 Standards
	What are the biggest constraints to reuse?	Has been mostly cost issues/consideration. Last heard, to get to Title 22 would need to charge $500 an acre foot to make up costs and can't compare to with $17 and $20 per acre foot currently available.	
Other Notes			Project in mind is to reduce the odor caused by WWTP which drifts into the development adjacent to WWTP. Would be ~$400k$500k. Tertiary treatment for delivery to ORMAT also discussed. Regionalized plants are not of an interest to City of El Centro

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	City of El Centro	City of El Centro
		Interviewee:		Terry Hagen/Norma Villacana/Randy Hines
		Date of Interview:		
1	What is your primary role?			City Engineer/ Planning and Zoning Director/ Plant Supervisor
2	Data current as of?		Treatment - 2006; Demand - 2004	27-Oct-10
	Current treatment capacity is XXMGD?		18MGD	21MGD + 16MGD Standby
	Current raw water storage capacity?			2 - 20-21MG Tanks ~40MG: Winter-~5day supply; Summer ~2.5day supply
	Current raw water pump station capacity?			
	Current clear water storage capacity?		10MG + 5MG (Total 15MG)	Lost 5MG tank to earthquake, so only 10MG currently. Add another 4MG by July of 2011
	Current clear water pump station capacity?		18000gpm	
3	Current Average Daily Demand (ADD)?		7.8MGD	7.8MGD
	Current Maximum Day Demand? at Peak Hour?		12.5MGD(MDD); 21700gpm(PHD)	Same
4	Do you have a model of the existing distribution system?			Have access to distribution system model (maintained by Carollo Engineers)
	Current system deficiencies (low pressure/low flow/WQ)?			Not currently, master plan would identify potential issues. Single-source non-looped system 20in to the regional mall. Would require ~$2M. Carollo may have some improvement ideas based on their model runs.
	Types of pipe in system			Newer pipe is PVC; Oler pipe is mostly AC with some Cast Iron.
	Program for replacing old/damaged pipe reaches?			No program; pipes replaced as they fail.
5	Future treatment capacity is XXMGD?		38MGD	63MGD (Entire General Plan buildout assumed)
	Future raw water storage capacity?			Want 10-day supply at peak summer ~630MG
	Future raw water pump station capacity?			
	Future clear water storage capacity?		20MG	60MG
	Future clear water pump station capacity?		18000gpm	Same
6	Future Average Daily Demand (ADD)?		11.9MGD	Same
	Future Maximum Day Demand? at Peak Hour?		29.7MGD (MDD), 24800gpm(PHD)	Same
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Water and Wastewater Master Plan Amendment-March2004, May 2004 CIP Report	Yes, but they are currently workin on it.
	When do you anticipate making upgrades/improvements,		Phased: 2005-2009, 2010-2014, 2019-2025	Same
8	What is your planning horizon?		2025	
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			Yes, they have one. Not available/confidential.
Other Notes				Currently only a single line out to mall. Would like to provide looped system; provide some fire storage for the mall.

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	Heber PUD	Heber PUD
		Interviewee:		John A. Jordan
		Date of Interview:		Thursday October 28, 2010 (10:00 AM)
1	What is your primary role?			General Manager
2	What are your land use policies as they relate to flood control?			We are a Special Dist. (under County jurisdiction)
3	Is there a plan that identifies future capital investments for stormwater?			Town of Heber Drainage Master Plan (Nolte - 2006)
4	Do you have a Master Drainage/Stormwater Plan?			Town of Heber Drainage Master Plan (Nolte - 2006)
5	Do you have design criteria pertaining to stormwater management facilities?			As outlined in County of Imperial Planning & Development guidelines.
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			As outlined in County of Imperial Planning & Development guidelines.
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			I don't know - have to ask Imperial County Public Works Dept. (760-482-4462).
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			Yes. Refer to Town of Heber Drainage Master Plan (Nolte - 2006).
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			N/A.
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			HPUD has no improvements planned - refer to County of Imperial Public Works (760-482-4462).
9	Do you have any combined stormwater/sewer (CSO) facilities?			HPUD does not - don't know about County of Imperial Public Works.
	Do you have any plans to separate them?			N/A.
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			HPUD does not - don't know about County of Imperial Public Works.
	Are soil conditions such that infiltration or recharge is practical?			Don't know - refer to Imperial County Public Works (760-482-4462).
12	What are the biggest constraints to stormwater			Connection to IID drain ditches.
Other Notes				Stormwater was covered under the Town of Heber Drainage Master Plan (Nolte - 2006) that was commissioned by Imperial County PW.

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	Heber PUD WWTP	Heber PUD WWTP
	Interviewee:	Graciela Lopez	John A. Jordan
Questions:	Date of Interview:	June 17, 2009	Oct. 28, 2010
1	What is your primary role?	Heber PUD Finance Manager	General Manager
2	Size of WWTP	0.81 (Plant built in 2000)	When the plant was originally constructed it had a capacity of .81MGD. During our expansion project it was discovered that the plant only has a current capacity of .65MGD (this is because of design).
	Any capacity issues; how close are you to the use of the design capacity?	No capacity issues at this time, average of about 0.5 MGD	HPUD currently has an average dailey capacity of .5MGD.
	Are you under any compliance requirements?	No compliance issues at this time. Previously, up to about a year ago, had compliance issues with E-coli. Started having problems when reached 0.6MGD, especially in Winter (slower sludge drying) solution is in place now - geotube in place along with few other changes…	Most pressing issue is lack of funding for the expansion/construction of the planned new WWTP (upgrade treatment and expand to 1.2MGD capacity).
3	What were total and monthly annual total flows from the plant in 2008?	Believes between 0.5 MGD and less. Summer typically higher than winter.	Currently the avg. daily flow is .5MGD.
4	What is your level of treatment?	Currently Primary. Have plans to upgrade to secondary but also trying to get tertiary water but will be if get contract with Ormat.	<- Refer to Graciela Lopez' answer.
	Any land disposal or reuse?	No	No.
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?	Project plan, full design completed, is to go to 1.2 MGD capacity. Have applied for funds already with different agencies (difficult to charge customers more), cost expected to be about 12.5 million dollars.	<- Refer to Graciela Lopez' answer.
6	What level of treatment and treatment process are anticipated?	Secondary with ultraviolent.	<- Refer to Graciela Lopez' answer.
7	What is your planning horizon?	2016	Sort of an open question - planning horizion for what? Raw sewage collection, treatment or discharge?
8	Is there a plan that identifies what future capital investments would be for the plant?	For current plan have applied for funding with several agencies including USDA and pre-application in to state revolving fund. Tomorrow, Thursday June 18th, there is public hearing to get rate increase approved.	<- Refer to Graciela Lopez' answer.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Plan to start build in 2010 or 2011 - Depends on financing. Expect upgrades to be completed in 18 months once started.	Any expansion/construction depends on financing. The current planned project can't be done in phases and this creates a special financing problem. Without financing to do the entire project HPUD may have to do some temporary upgrades to meed regulatory requirements until full funding can be obtained.
9	Any plans for reuse?	Currently in discussion with Ormat, who is considering using reclaimed water for their cooling towers. Heber has submitted quality of water information to Ormat. They are looking for money but it is expected they will get it. If it does not work out with Ormat still under consideration to try to reuse water for irrigations of parks.	<- Refer to Graciela Lopez' answer.
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Yes (see above)	Yes. Currently negotiating with local energy company. And at some time there will be demand by other users.
	From your perspective, what do you envision the future of treated wastewater effluent would be?		All treated WW will be reused in some way. Either by other entities, farming or municipal reuse (either by retreating for potable water or for parks etc.).
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	California has several regulations that would have an impact and there are sometimes "surprises" such as changes to stricter rules.	As long as there is an EPA and CalEPA there will be more regulations (not all of them good). Also controlled by State Water Board regulations.
	What are the biggest constraints to reuse?		
Other Notes		(Noted) Overall: John Jordan may have more information or details to add but is out of the office until Monday June 22nd.	

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Heber PUD	Heber PUD
		Interviewee:		John A. Jordan
		Date of Interview:		Thursday Oct. 28, 2010 (10:00 AM)
1	What is your primary role?			General Manager
2	Data current as of?		2005	Oct. 28, 2010
	Current treatment capacity is XXMGD?		5.0MGD	2.0MGD
	Current raw water storage capacity?			5.8 million gallons (raw water ponds) (see NOTE)
	Current raw water pump station capacity?			1,400 GPM (see NOTE)
	Current clear water storage capacity?			5.5 million gallons (see NOTE)
	Current clear water pump station capacity?			1,500 GPM
3	Current Average Daily Demand (ADD)?		1.1MGD	1.1MGD
	Current Maximum Day Demand? at Peak Hour?		2.8MGD(MDD); 3000gpm(PHD)	2.2MGD (MDD); 3,000GPM (PHD)
4	Do you have a model of the existing distribution system?		Yes - WaterCAD (Nolte Associates, Inc.)	Since 2004 all new developments have models. Currently completing a "Water Dist. Study" on the older sections of the Town (should be completed mid 2011)
	Current system deficiencies (low pressure/low flow/WQ)?		Presure Drops, Fire flow below acceptable levels	CDPH Permit is for 2MGD - we have exceeded that in the past two years. Current plans to expand capacity to 6MGD in 3 phases. Phase 1 & 2 are complete and working on Phase 3. HPUD has no current WQ problems.
	Types of pipe in system		AC, PVC, HDPE	AC, PVC & HDPE
	Program for replacing old/damaged pipe reaches?			Currently we only replace when breaks occur.
5	Future treatment capacity is XXMGD?		15.5MGD	Current design can be expanded up to 16MGD.
	Future raw water storage capacity?			See NOTE
	Future raw water pump station capacity?			See NOTE
	Future clear water storage capacity?			Future capacity will depend on future demand and expansion of construction.
	Future clear water pump station capacity?			See NOTE
6	Future Average Daily Demand (ADD)?		5.4MGD	Plant expansion plans are currently for 6MGD.
	Future Maximum Day Demand? at Peak Hour?		13.5MGD (MDD); 15000gpm(PHD)	After the current expansion project to 6MGD, the plant can be expanded up to 16MGD without major redisign.
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			A 6MGD plant can actually put out 8MGD by exceeding our current "Permit Capacity".
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Capital Improvements Plan	The current expansion project would meet HPUD demands for the next 15 years (maybe more - too many variables here).
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		2008, 2013, and 2018	The current expansion project is planned to be completed by the end of 2011. It was a 3 phase project and Phase 1 & 2 are already complete.
8	What is your planning horizon?		2018	Sort of an open question - planning horizion for what? Raw water supply, water treatment or water distribution?
9	Mitigation procedure for drought/low supply conditions?			Our raw water supply is provided by IID. Municipal water supplies aren't usually affected by drought. Low raw water supply could be a problem but not likely unless a major catastrophic event occurs.
10	Plan in the event of a disaster/emergency?			HPUD has an Emergency Response Plan.
Other Notes				

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of Holtville	City of Holtville
		Interviewee:		Justina Arce
		Date of Interview:		8/18/2010
1	What is your primary role?			Senior Planner for the Holt Group
2	What are your land use policies as they relate to flood control?		Evaluate hazardous flood locations and inform the public and proposed developers.	The City has adopted development standards for stormwater need, no master plan (would cost approx. $60k)
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction.	No. Developer driven.
4	Do you have a Master Drainage/Stormwater Plan?			No
5	Do you have design criteria pertaining to stormwater		Yes	No, there is no infrastructure
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		None mentioned	100-year
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			No
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Several piped systems are undersized or do not funciton adequately. Majority of runoff is conveyed via gravity surface flow street system.	No
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Multiple locations for piped systems. Flooding is main way flow is conveyed in most of City (i.e. surface street flow).	There are definitely areas in the community that flood. Primarily next to a school district where stagnant water pools as a result of lack of drains. Another issue is that about 60% flows into industrial area from a lack of a proper drainage and conveyance system. A preliminary engineering report identified a need for a large retention basin to prevent flooding ~ $6M
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs	5-years or as funds become available
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	Yes
	Do you have any plans to separate them?			Yes
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		Yes. Some runoff directed to retention basins for infiltration, but most stormwater discharged to Alamo River	No
	Are soil conditions such that infiltration or recharge is		Yes	No.
12	What are the biggest constraints to stormwater conveyance?			Major pipeline is non existant in a number of areas in community- also big need for a pump station. In town flows are adequate, outside of the center of town but within the city boundaries the conveyance systems are inadequate.
Other Notes				Stormwater was covered under the Town of Heber Drainage Master Plan (Nolte - 2006) that was commissioned by Imperial County PW.

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
Questions:	Plant:	City of Holtville Municipal WWTP	City of Holtville Municipal WWTP
	Interviewee:	Frank Cornejo	Justina Arce
	Date of Interview:	June 23, 2009	August 18, 2010
1	What is your primary role?	Waterworks Supervisor	Senior Planner for the Holt Group
2	Size of WWTP	0.85	1.3 M
	Any capacity issues; how close are you to the use of the design capacity?	Not at this time	No growth in the City of Holtville if there were any larger subdivsions hard pressed to service - able to serve 350 homes.
	Are you under any compliance requirements?	In process of being issues a cease and desist for ammonia, heavy metals, few other things that did not meet NPDES requirements.	Under cease and desist status. Grant awarded to make improvements to become compliant. $ 1M grant from BECC. Need 50% matching funds. In violation due to pesticide infiltration from ag fields
3	What were total and monthly annual total flows from	Average flow of 0.6 to 0.65 MGD – been pretty consistent for while.	
4	What is your level of treatment?	Currently Secondary with UV disinfection.	Secondary
	Any land disposal or reuse?	No, only NPDES permitted disposal.	
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?	Compliance order to bring facility to current and upcoming regulations. Working with firm who specializes in design of WWTP facilities. Staff currently working on securing funding and moving forward with planning and design. Will be presented to region board	
6	What level of treatment and treatment process are anticipated?	Believe will still be Secondary with disinfection but would be much more efficient treatment method – new process – will use activated sludge and perhaps membranes leading to higher quality effluent.	City Engineer doesn't see how the implementation of RW will work - City Manager aggressively seeking alt channeling to Geothermal -Ormat. Also discussion of treating enough so that IID could take it into canal system.
7	What is your planning horizon?	Would like to initially expand to 1.2 MGD then a final expansion to 1.8 MGD – phased expansion with timeline depends on funding…	
8	Is there a plan that identifies what future capital investments would be for the plant?	Staff working a various avenues included USDA, grants through American Recovery Act, etc. A lot of paper submitted; believe some projects have got approval – mostly for corrections.	No USDA proposed grants, BECC funded by EPA -partnership with NADVAC that covers 100% prelim design costs - 30% implementation - still gaps..WWTP project City of Holtville Sanitary Sewer Outfall Project Not through the Amerian Recovery Act but through BECC. The grants have not been awarded construction funding.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Would like try to secure funding this year and looking towards end of year to move forward with design and perhaps by end of 2010 to start expansion to 1.2 MGD, realistically may be later.	Not by the end of 2010 but 2012.
9	Any plans for reuse?	Trying to schedule meeting with National Rural Water Association. Also will meet to determine feasiblity of Holtville reuse alternative.	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Use for crop irrigation - crops that would not require increased treatment levels. Not aware of any talk to upgraded to tertiary treatment.	City Manager seeking alt channeling to Geothermal -Ormat. Also discussion of treating enough so that IID could take it into canal system.
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Yes. Don't know how feasible is since will take a significant infrastructure –initial capital. Possibly regional approach	
10	Any regulatory constraints associated with upgrading effluent quality to meet a new market?	Concerns of heads butting, that is regs or rules conflicting between Department of Public Health and Regional Board.	
	What are the biggest constraints to reuse?	Funding – infrastructure needs to be in place - pipeline, etc. The Holtville WWTP Facility is pretty remote from town – surrounded by Ag fields and in order to pump in back to city or industry like geothermal plant would need lot of distribution infrastructure. As far as use on crops would depend on type of crop farmers are planting or willing to plant (since considering application of current treatment level - Secondary with disinfection).	
Other Notes		Note: Call was over bad Cell phone connection.	Justina will provide BECC Grant Application and Project Description.
			Priority Projects Identified
			1) Wastewater Collection System Improvements - $3.3M
			2) Sewer Master Plan - $75k

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	City of Holtville	City of Holtville
		Interviewee:		Justina Arce
		Date of Interview:		18-Aug-10
1	What is your primary role?			Senior Planner for the Holt Group
2	Data current as of?		2006	2010
	Current treatment capacity is XXMGD?		3.15MGD	
	Current raw water storage capacity?		11.3MG	City has 3 pond rehabilitation projects under a USDA grant. So far have repaired one pond - berms. Lined3 MGD daily demand - 3 days of storage
	Current raw water pump station capacity?			
	Current clear water storage capacity?		1.5MG	2.4 MG Tank finished earlier this year…earthquake destroyed old 1.5 - now at 1.4
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?		1.5MGD	3 MGD peak hours
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?		Fire flows and residual pressures at the Barbara Worth Country Club are not adequate. Cast Iron Piping (CIP) deteriorating. Valve and fire hydrant deficiencies.	No improvements to this..City limits have undersized lines - poor fire flow.
	Types of pipe in system		PVC, AC, CIP, AIP	
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?		6.0MGD	
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?		4.0MG + 1.0MG	
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?		1.9MGD	same - no major developments Inc. city limit is built out
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Water Master Plan	
	When do you anticipate making upgrades/improvements,			
8	What is your planning horizon?		2020	2020 - storage capacity next year
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
Other Notes				Priority Projects Identified 1) Master Water Plan - $75k

Stormwater Inventory

			Known Conditions	Updated Conditions
		Plant:	City of Imperial	City of Imperial
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction	
4	Do you have a Master Drainage/Stormwater Plan?			
5	Do you have design criteria pertaining to stormwater		Yes	
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		100-yr	
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Yes, however City systems discharge to IID drains which were not sized for an urbanized watershed.	
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Detention/retention facilities used to restrict storm flows into IID drains.	
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs	
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is			
12	What are the biggest constraints to stormwater			
	Other Notes			

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
Questions:	Plant:	City of Imperial Water Pollution Control Plant	City of Imperial
	Interviewee:	Jackie Loper	
	Date of Interview:	June 16, 2009	
1	What is your primary role?	Maintenance Supervisor	
2	Size of WWTP	Currently 2.4 MGD Capacity.	
	Any capacity issues; how close are you to the use of the design capacity?	No, currently using about 1.4 to 1.6 MGD.	
	Are you under any compliance requirements?	No.	
3	What were total and monthly annual total flows from	Currently using about 1.4 to 1.6 MGD.	
4	What is your level of treatment?	Secondary [with disinfection]… Understanding from what told is that with changing regulations will be classified as grade 3 plant.	
	Any land disposal or reuse?	No (all NPDES disposal)	
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?	Most components of plant build for expansion to 5 MGD relatively easily.	
6	What level of treatment and treatment process are anticipated?	At the current plant the type and level of treatment will be similar to what's in use. The Keystone plant will be MBR treatment.	
7	What is your planning horizon?	2010/2011 (before housing slowdown) currently 2011/2012 we need to have plans in place by these dates to allow for construction time in order to meet needs of the public by 2015.	
8	Is there a plan that identifies what future capital investments would be for the plant?	The City currently has a rate study under way to address the current and future needs for both the existing plant as well as the Keystone plant.	
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	All plans need to be in place in the next 3 years in order to have enough time for constructions, to be operational in time for the public needs.	
9	Any plans for reuse?	No, not with this facility. (City leading plans for Keystone/Mesquite Lake reclamation facility).	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Currently there are no plans for the reuse water, but the City is working with prospective partner to develop the reuse and have a market for the reuse water by the time that the treatment plant [Keystone] is operational.	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Public or private reuse of the water i.e. Landscape, commercial or industrial uses.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	None at this time.	
	What are the biggest constraints to reuse?	Developing a viable and profitable market	
Other Notes		Additions or corrections provided by Jackie June 19th.	

Potable Water Inventory

		Known Conditions	Updated Conditions
Questions:	Location	City of Imperial	City of Imperial
	Interviewee:		
	Date of Interview:		
1	What is your primary role?		
2	Data current as of?	2008	
	Current treatment capacity is XXMGD?	7MGD	
	Current raw water storage capacity?	10MG	
	Current raw water pump station capacity?	2 x 1.5MGD + 2 x 3.5MGD; Total of 10.0MGD	
	Current clear water storage capacity?	3 x 2.0MG; Total 6MG	
	Current clear water pump station capacity?	3 x 3.6MGD; Total 10.8MGD	
3	Current Average Daily Demand (ADD)?	1.8	
	Current Maximum Day Demand? at Peak Hour?		
4	Do you have a model of the existing distribution system?	Yes - BJ Engineering & Surveying Inc.	
	Current system deficiencies (low pressure/low flow/WQ)?		
	Types of pipe in system	AC(~46% of total system) and PVC	
	Program for replacing old/damaged pipe reaches?		
5	Future treatment capacity is XXMGD?	7MGD	
	Future raw water storage capacity?		
	Future raw water pump station capacity?		
	Future clear water storage capacity?	10MG	
	Future clear water pump station capacity?		
6	Future Average Daily Demand (ADD)?	9.3MGD	
	Future Maximum Day Demand? at Peak Hour?		
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?		
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)	Master Plan for the Water Distribution System, May 2006	
	When do you anticipate making upgrades/improvements,	As development occurs	
8	What is your planning horizon?	2030	
9	Mitigation procedure for drought/low supply conditions?		
10	Plan in the event of a disaster/emergency?		
Other Notes			

Stormwater Inventory

		Known Conditions	Updated Conditions
Questions:	Plant:	Niland	Niland
	Interviewee:		
	Date of Interview:		
1	What is your primary role?		
2	What are your land use policies as they relate to flood control?		
3	Is there a plan that identifies future capital investments for stormwater?		
4	Do you have a Master Drainage/Stormwater Plan?		
5	Do you have design criteria pertaining to stormwater management facilities?		
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?		
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		
9	Do you have any combined stormwater/sewer (CSO) facilities?		
	Do you have any plans to separate them?		
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		
	Are soil conditions such that infiltration or recharge is practical?		
12	What are the biggest constraints to stormwater conveyance?		
Other Notes			No stormwater system to speak of

Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	Niland WWTP	Niland WWTP
		Interviewee:	James Strang	David Godsey
	Questions:	Date of Interview:	June 26, 2009	October 27, 2010
1	What is your primary role?		Lead Operator	Local Operation Superintendent
2	Size of WWTP		0.5	0.5
	Any capacity issues; how close are you to the use of the design capacity?		No capacity issues, average flows of about 0.175 MDG to .18 MGD.	No capacity issues, average flows have dropped to about 0.08MGD
	Are you under any compliance requirements?		Recently got a Cease and Desist order from Regional Water Quality Control Board because of copper levels. Understand that have a couple of years to correct the problem.	Copper levels still an issue. Difficult to bring discharges into compliance as they have only primary level of treatment.
3	What were total and monthly annual total flows from the plant in 2008?		Average flows of about 0.175 to 0.18 MDG. A couple of years ago the collection system was rehabilitated – relined to correct groundwater infiltration problems – rehab reduced flows (prior to, about 3 years ago average was 0.23 to 0.24 MGD).	
4	What is your level of treatment?		Primary – bar screen and ponds. Sodium hypochlorite for disinfection in contact chamber then chlorine neutralized before leaves plant.	No advanced bio; Ponds w/ flouridation/chlorination
	Any land disposal or reuse?		No	No.
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		None at this time – appears population has gone down since the number of connections has gone down.	
6	What level of treatment and treatment process are		No changes to treatment level or processes are planned at this time.	
7	What is your planning horizon?		"Poor right now, just trying to get by" – currently only 2 of 6 areas of the plant are operating, one pump's been down a while other just gave out so currently running a rental pump. Just received approval from USDA for grant money to get new lift station, bar screen and believe a new generator. Also getting some help from the County for aeration equipment.	
8	Is there a plan that identifies what future capital investments would be for the plant?		No real plan that aware of rely a lot on USDA and County help.	No. Though they got an Economic Development Department grant to help with infiltration issues. Liners were placed in the lines. No CIP for collection system.
	When do you anticipate making upgrades, what is the		This year for maintenance / new equipment discussed above.	
9	Any plans for reuse?		No plans currently but when they visited last, the Regional board recommended reuse when last visited. Indicated that will need to find another way to discharge water, not to Salton Sea- because regs are going to become more stringent over time and discharging to Sea would be harder.	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		Regional board recommended irrigation, possibly alfalfa or even just spraying out to dry/desert land behind plant – no benefit but alternative disposal...	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		If money was there to increase plant treatment level and set up distribution system then yes.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		Always regulations. Plant manager, David Godsey (455-3439), might have better information.	
	What are the biggest constraints to reuse?			
	Other Notes			Niland SD may dissolve due to funding issues (residents not paying taxes that NSD receives their funding from). Key project may involve connecting Niland to Calipatria's WWTP

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Niland	Niland
		Interviewee:		
		Date of Interview:		
1	What is your primary role?			
2	Data current as of?			
	Current treatment capacity is XXMGD?			
	Current raw water storage capacity?			
	Current raw water pump station capacity?			
	Current clear water storage capacity?			
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			
	When do you anticipate making upgrades/improvements, what is the time frame			
8	What is your planning horizon?			
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
Other Notes			See Calipatria for Potable Water	See Calipatria for Potable Water

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	Seeley	Seeley
		Interviewee:		
		Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood control?		Several areas directly adjacent to New River are subject to flooding. County has Flood Damage Prevention Ordinance.	
3	Is there a plan that identifies future capital investments for stormwater?			
4	Do you have a Master Drainage/Stormwater Plan?			County owned.
5	Do you have design criteria pertaining to stormwater management facilities?			
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
9	Do you have any combined stormwater/sewer (CSO) facilities?			
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is practical?			
12	What are the biggest constraints to stormwater conveyance?			
Other Notes				No stormwater system to speak of

Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	Seeley County WWTP	Seeley County WWTP
		Interviewee:	Hector Orozco	Anthony Munger
	Questions:	Date of Interview:	June 24, 2009	October 28, 2010
1	What is your primary role?		Chief Operator	
2	Size of WWTP		0.2	Same
	Any capacity issues; how close are you to the use of the design capacity?		Currently below capacity; 0.1 to 0.15 MGD.	Not full. Capacity @~50%
	Are you under any compliance requirements?		Just standard NPDES requirements.	Standard NPDES Requirements
3	What were total and monthly annual total flows from the plant in 2008?		As above around 0.1 to 0.15 MGD, more flow in winter.	Same
4	What is your level of treatment?		Secondary with UV disinfection.	Same
	Any land disposal or reuse?		No. NPDES permitted discharge only – to River.	Same
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		No current plans for increasing capacity.	Current capacity meets anticipated need
6	What level of treatment and treatment process are anticipated?		Not that aware of.	None. In talking w/ solar project, they would pay to upgrade to tertiary treated water in exchange for receiving a certain amount of treated effluent.
7	What is your planning horizon?		Not aware of, not involved with.	N/a
8	Is there a plan that identifies what future capital investments would be for the plant?		No involved with – Sandra Esitgoy might be better contact for some of these questions (call main CWD number).	No Plan. Pipes fixed as they break.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		N/A	
9	Any plans for reuse?		No. Fine with how things are done right now, meeting requirements and have good communication with regional board.	Without solar project, no plans for reuse. W/ solar project, yes.
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		Not aware of any... There are small parks in town…	Yes. Water for SES Solar Two facility. Other possible users include existing development and new development.
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		Can't say.	Will provide 0.15 - 0.20 MGD of reclaimed water for use in construction and operation activities to SES Solar Two facility (non-potable only).
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		No.	Title 22 Compliance. Plant will be upgraded by SES Solar Two facility in exchange for access to recycled water. If given the go-ahead, may be completed 2011-2012.
	What are the biggest constraints to reuse?		Would require more testing and treatment.	
Other Notes			See "Aside" note under Holtville	No identified priority projects. Replacement of existing collection system

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Seeley	Seeley
		Interviewee:		Anthony Munger
		Date of Interview:		
1	What is your primary role?			
2	Data current as of?		Capacity - 2006; Demand - 2003	40479
	Current treatment capacity is XXMGD?		0.75MGD	Same
	Current raw water storage capacity?			2MG currently, though additional 5MG is being constructed
	Current raw water pump station capacity?			600gpm
	Current clear water storage capacity?		0.90MGD	1.3MG will be available at the beginning of the year
	Current clear water pump station capacity?		2000gpm	Same
3	Current Average Daily Demand (ADD)?		0.245MGD	0.29 MGD
	Current Maximum Day Demand? at Peak Hour?		0.567MGD (MDD); 850gpm(PHD)	No Record for Peak
4	Do you have a model of the existing distribution system?			Yes, there is a model
	Current system deficiencies (low pressure/low flow/WQ)?			Old pipes.
	Types of pipe in system			AC
	Program for replacing old/damaged pipe reaches?			Received a grant for pipe replacement. Will begin implementation Jan. 2011
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			2-500k gal tanks (1M gal total)
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?		0.426MGD	Same
	Future Maximum Day Demand? at Peak Hour?		0.985MGD(MDD); 1500gpm (PHD)	Same
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Master Plan for the Water Distribution System for the City of Westmoreland (Holt Group 1997)	Raw water ponds are in the process of being expanded and lined. Clear storage will have been upgraded by Jan 2011. Distribution system pipe replacement beginning Jan 2011.
	When do you anticipate making upgrades/improvements, what is the time frame?			Last plan update was 2003.
8	What is your planning horizon?		2020	2020
9	Mitigation procedure for drought/low supply conditions?			Community outreach is the only means of mitigation in drought/low supply/emergency conditions (post office, letters, etc.)
10	Plan in the event of a disaster/emergency?			Secondary power source can run all treatment and distribution systems. If source is unavailable, El Centro or naval base could assist w/ emergency pipelines
Other Notes				Distribution system replacements will begin Jan 2011.

Stormwater Inventory

			Known Conditions	Updated Conditions
		Plant:	Westmoreland	Westmoreland
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?			
4	Do you have a Master Drainage/Stormwater Plan?			
5	Do you have design criteria pertaining to stormwater management facilities?			
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
9	Do you have any combined stormwater/sewer (CSO) facilities?			
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is practical?			
12	What are the biggest constraints to stormwater conveyance?			
Other Notes				

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	Westmoreland	Westmoreland
	Interviewee:		
Questions:	Date of Interview:		
1	What is your primary role?		
2	Size of WWTP		
	Any capacity issues; how close are you to the use of the design capacity?		
	Are you under any compliance requirements?		
3	What were total and monthly annual total flows from the plant in 2008?		
4	What is your level of treatment?		
	Any land disposal or reuse?		
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		
6	What level of treatment and treatment process are anticipated?		
7	What is your planning horizon?		
8	Is there a plan that identifies what future capital investments would be for the plant?		
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		
9	Any plans for reuse?		
	Is there a current or future market for WWTP flows?		
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		
	What are the biggest constraints to reuse?		
Other Notes			

Potable Water Inventory

			Known Conditions	Updated Conditions
		Location	Westmoreland	Westmoreland
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	Data current as of?			
	Current treatment capacity is XXMGD?			
	Current raw water storage capacity?			
	Current raw water pump station capacity?			
	Current clear water storage capacity?			
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
8	What is your planning horizon?			
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
	Other Notes			

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	Gateway of the Americas	Gateway of the Americas
		Interviewee:		Ed Delgado
		Date of Interview:		10/28/2010
1	What is your primary role?			Deputy Director of Public Works - Administration
2	What are your land use policies as they relate to flood control?		Parking areas designed to pond to a depth of 6in. During storm events.	Same
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction	Same
4	Do you have a Master Drainage/Stormwater Plan?		No.	Same
5	Do you have design criteria pertaining to stormwater management facilities?		Yes	Same
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		100-yr	Same
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Yes	Same
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs	Same
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	None
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		Retention basins designed to infiltrate water into ground, or discharge to Ash Canal or Alamo River.	Same
	Are soil conditions such that infiltration or recharge is practical?		Yes	Same
12	What are the biggest constraints to stormwater conveyance?			None
Other Notes				

Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	Gateway of the Americas WWTP	Gateway of the Americas WWTP
		Interviewee:	Ed Delgado	Ed Delgado
	Questions:	Date of Interview:	June 18, 2009	October 28, 2010
1	What is your primary role?		Administrative Analyst for County of Imperial.	Deputy Director of Public Works - Administration
2	Size of WWTP		0.2	Same
	Any capacity issues; how close are you to the use of the design capacity?		Consideration of expansion – not yet close capacity but CHP facility wants to tie in, which would increasing required capacity. See question 8.	Currently in Expansion Phase II
	Are you under any compliance requirements?		Not that aware of. None.	None
3	What were total and monthly annual total flows from the plant in 2008?		Unsure, contracted operator – Rocky Vandergriff might know. Unknown. Don't have anything current, but a study from 2005 listed inflow at approximately 14,000 gallons per day as measured by water meter readings.	Approximately 14,000 GPD
4	What is your level of treatment?		No Sure. Filtration and ultraviolet light disinfection.	Same
	Any land disposal or reuse?		No Sure.	None
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		Planned to happen in phases, currently in phase one of three phases for plant expansion. Not sure of phase 2 or 3 size. Planned to happen in 5 phases, currently in phase one. Ultimate planned capacity to reach 1.5 MGD with daily operational flows around 1.0 to 1.1 MGD	Same
6	What level of treatment and treatment process are anticipated?		Don't think any change in treatment level is planned. BIOLAC activated wastewater treatment lagoons, blower aeration chains, integral clarifiers, solar sludge dryer, backwashing filters, Ultraviolet lighting banks	Same
7	What is your planning horizon?		Not sure. Several years dependent upon growth rate and funding.	Same
8	Is there a plan that identifies what future capital investments would be for the plant?		Not sure. One conducted in 2005; one rate study due to commence in 1-2 months.	Service Area Plan, 2005
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		All contingent on funding – funding not yet identified. Will also be driven by growth rate of the area.	Currently in Expansion Phase II. Balance contingent on growth and funding.
9	Any plans for reuse?		No sure.	None
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		As part of prelim CHP tie-in study was consideration of using for irrigation. No other plans for reuse.	Same
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		Don't envision in immediate future – for irrigation if anything	Same
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		Not sure. Regulatory compliance could prove cost prohibitive and limit expansion. Biggest constraints to reuse include lack of practical knowledge in the area and costs.	Same
	What are the biggest constraints to reuse?			Same
	Other Notes		Additions or corrections provided by Ed (via email) June 23rd and June 24th. Also when plant operator available will ask about average flows and treatment level (current and furture)	

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Gateway of the Americas	Gateway of the Americas
		Interviewee:		Ed Delgado
		Date of Interview:		28-Oct-10
1	What is your primary role?			Deputy Director of Public Works - Administration
2	Data current as of?		2007	2010
	Current treatment capacity is XXMGD?		.12MGD (as of 2005)	Same
	Current raw water storage capacity?		1.8MG	Same
	Current raw water pump station capacity?			
	Current clear water storage capacity?		1MG	Same
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?		0.95MGD	Same
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			Occassionalexceedance of water quality limits
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?		2.9MGD	Same
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			Service Area Plan, 2005
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			Currently undergoing Phse II expansion.
8	What is your planning horizon?		2025	Same
9	Mitigation procedure for drought/low supply conditions?			N/A
10	Plan in the event of a disaster/emergency?			
Other Notes			Gateway SAP (pdf) had broken link error messages in place of most capacity values ("Error! Not a valid link.")	PDF of Service Area Plan available if desired

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	City of El Centro	City of El Centro
		Interviewee:		Terry Hagen/Norma Villacana/Randy Hines
		Date of Interview:		
1	What is your primary role?			City Engineer/ Planning and Zoning Director/ Plant Supervisor
2	Data current as of?		Treatment - 2006; Demand - 2004	27-Oct-10
	Current treatment capacity is XXMGD?		18MGD	21MGD + 16MGD Standby
	Current raw water storage capacity?			2 - 20-21MG Tanks ~40MG: Winter-~5day supply; Summer ~2.5day supply
	Current raw water pump station capacity?			
	Current clear water storage capacity?		10MG + 5MG (Total 15MG)	Lost 5MG tank to earthquake, so only 10MG currently. Add another 4MG by July of 2011
	Current clear water pump station capacity?		18000gpm	
3	Current Average Daily Demand (ADD)?		7.8MGD	7.8MGD
	Current Maximum Day Demand? at Peak Hour?		12.5MGD(MDD); 21700gpm(PHD)	Same
4	Do you have a model of the existing distribution system?			Have access to distribution system model (maintained by Carollo Engineers)
	Current system deficiencies (low pressure/low flow/WQ)?			Not currently, master plan would identify potential issues. Single-source non-looped system 20in to the regional mall. Would require ~$2M. Carollo may have some improvement ideas based on their model runs.
	Types of pipe in system			Newer pipe is PVC; Oler pipe is mostly AC with some Cast Iron.
	Program for replacing old/damaged pipe reaches?			No program; pipes replaced as they fail.
5	Future treatment capacity is XXMGD?		38MGD	63MGD (Entire General Plan buildout assumed)
	Future raw water storage capacity?			Want 10-day supply at peak summer ~630MG
	Future raw water pump station capacity?			
	Future clear water storage capacity?		20MG	60MG
	Future clear water pump station capacity?		18000gpm	Same
6	Future Average Daily Demand (ADD)?		11.9MGD	Same
	Future Maximum Day Demand? at Peak Hour?		29.7MGD (MDD), 24800gpm(PHD)	Same
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Water and Wastewater Master Plan Amendment-March2004, May 2004 CIP Report	Yes, but they are currently workin on it.
	When do you anticipate making upgrades/improvements,		Phased: 2005-2009, 2010-2014, 2019-2025	Same
8	What is your planning horizon?		2025	
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			Yes, they have one. Not available/confidential.
Other Notes				Currently only a single line out to mall. Would like to provide looped system; provide some fire storage for the mall.

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of El Centro	City of El Centro
		Interviewee:		Terry Hagen/Norma Villacana/Randy Hines
		Date of Interview:		
1	What is your primary role?			City Engineer/ Planning and Zoning Director/ Plant Supervisor
2	What are your land use policies as they relate to flood			Based on Density
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction.	Yes, currently being developed
4	Do you have a Master Drainage/Stormwater Plan?		No	Draft is complete, but no funding available.
5	Do you have design criteria pertaining to stormwater management facilities?		No.	Retention basin standards: 100yr storm contained and discharged to IID drains over 3 days. General rule is 1ac@4in deep for every 16 acres of development. No collection criteria. Operate under general CA water law
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			Carollo hired a sub-consultant o do hydrological study.
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			Absolutely not
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			Identified in Master Plan. Staff will send to GEI.
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs.	When funds are available.
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned	No. Infiltration causes problems at WW plant. Not a stormwater problem. Water table is at ~8ft
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		None mentioned	Currently capture and discharge to IID drains. Would need to evaluate based on economics
	Are soil conditions such that infiltration or recharge is practical?			No. Soil conditions are not condusive to infiltration. Mostly clays with high water table.
12	What are the biggest constraints to stormwater			Funds
Other Notes				To implement Master Plan, would need ~$200M for stormwater portion. There is lots of surface drainage. Quite a bit of the flooding is caused by ag land. A regional stormwater management facility is a high priority w/IID. Regional facility would push MP requirement off 15-20 years.

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	El Centro Municipal WWTP	El Centro Municipal WWTP
	Interviewee:	Randy Hines	Terry Hagen/Norma Villacana/Randy Hines
Questions:	Date of Interview:	June 18, 2009	October 27, 2010
1	What is your primary role?	Plant Supervisor	City Engineer/ Planning and Zoning Director/ Plant Supervisor
2	Size of WWTP	8	8
	Any capacity issues; how close are you to the use of the	No issues at this time, using about 3.6 MGD.	No capacity issues
	Are you under any compliance requirements?	Yes and no – Have some compliance issues with selenium and are expecting the board to issue cease and desist or time schedule order that will force them to take action.	No major or consistent problems. Occasionally out of compliance. General operational constraints
3	What were total and monthly annual total flows from	Would say 3.6 MGD average for 2008.	3.6MGD average
4	What is your level of treatment?	Secondary with UV disinfection	Secondary w/ UV disinfection
	Any land disposal or reuse?	No	Nn
5	What is the anticipated need and planned future design	None at this time.	None
6	What level of treatment and treatment process are anticipated?	No change planned at this time, have had few people approaching to increase – no plans on the table.	Looking to update for odor control for the existing plant
7	What is your planning horizon?	Lock planning into 5 year increments, current one to 2011 or 2012.	Same
8	Is there a plan that identifies what future capital investments would be for the plant?	Have a 5 year capital improvement plan which they will be taking to council at the end of the summer. No money committed yet.	Capital Improvement funding would be needed to update collection and plant upgrades for odor control. Completed, but not currently approved. No specific date anticipated.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Most is repairs to existing pipeline and collection system. Little identified for plant and what is maintenance.	Upgrades to collection or WWTP dependent upon development impact fees, infrastructure and reimbursement agreements.
9	Any plans for reuse?	There has been some discussion in the City internally but no push.	Have been in talks with ORMAT to make improvements to upgrade to tertiary so effluent can be delivered to ORMAT. Just in talks currently. Timeline on ORMAT project is 36 mo. Other ideas involve running purple pipe to highway dividers, parks, schools, and or solar farms
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Have had interest expresses by geothermal plants. Irrigation also an options	Geothermal, public land irrigation, solar farms
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Don't see until raw water comes up in costs. Can't compete.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	No, believe and understand it will be easier than complying with permit.	Title 22 Standards
	What are the biggest constraints to reuse?	Has been mostly cost issues/consideration. Last heard, to get to Title 22 would need to charge $500 an acre foot to make up costs and can't compare to with $17 and $20 per acre foot currently available.	
Other Notes			Project in mind is to reduce the odor caused by WWTP which drifts into the development adjacent to WWTP. Would be ~$400k$500k. Tertiary treatment for delivery to ORMAT also discussed. Regionalized plants are not of an interest to City of El Centro

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Heber PUD	Heber PUD
		Interviewee:		John A. Jordan
		Date of Interview:		Thursday Oct. 28, 2010 (10:00 AM)
1	What is your primary role?			General Manager
2	Data current as of?		2005	Oct. 28, 2010
	Current treatment capacity is XXMGD?		5.0MGD	2.0MGD
	Current raw water storage capacity?			5.8 million gallons (raw water ponds) (see NOTE)
	Current raw water pump station capacity?			1,400 GPM (see NOTE)
	Current clear water storage capacity?			5.5 million gallons (see NOTE)
	Current clear water pump station capacity?			1,500 GPM
3	Current Average Daily Demand (ADD)?		1.1MGD	1.1MGD
	Current Maximum Day Demand? at Peak Hour?		2.8MGD(MDD); 3000gpm(PHD)	2.2MGD (MDD); 3,000GPM (PHD)
4	Do you have a model of the existing distribution system?		Yes - WaterCAD (Nolte Associates, Inc.)	Since 2004 all new developments have models. Currently completing a "Water Dist. Study" on the older sections of the Town (should be completed mid 2011)
	Current system deficiencies (low pressure/low flow/WQ)?		Presure Drops, Fire flow below acceptable levels	CDPH Permit is for 2MGD - we have exceeded that in the past two years. Current plans to expand capacity to 6MGD in 3 phases. Phase 1 & 2 are complete and working on Phase 3. HPUD has no current WQ problems.
	Types of pipe in system		AC, PVC, HDPE	AC, PVC & HDPE
	Program for replacing old/damaged pipe reaches?			Currently we only replace when breaks occur.
5	Future treatment capacity is XXMGD?		15.5MGD	Current design can be expanded up to 16MGD.
	Future raw water storage capacity?			See NOTE
	Future raw water pump station capacity?			See NOTE
	Future clear water storage capacity?			Future capacity will depend on future demand and expansion of construction.
	Future clear water pump station capacity?			See NOTE
6	Future Average Daily Demand (ADD)?		5.4MGD	Plant expansion plans are currently for 6MGD.
	Future Maximum Day Demand? at Peak Hour?		13.5MGD (MDD); 15000gpm(PHD)	After the current expansion project to 6MGD, the plant can be expanded up to 16MGD without major redisign.
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			A 6MGD plant can actually put out 8MGD by exceeding our current "Permit Capacity".
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Capital Improvements Plan	The current expansion project would meet HPUD demands for the next 15 years (maybe more - too many variables here).
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		2008, 2013, and 2018	The current expansion project is planned to be completed by the end of 2011. It was a 3 phase project and Phase 1 & 2 are already complete.
8	What is your planning horizon?		2018	Sort of an open question - planning horizion for what? Raw water supply, water treatment or water distribution?
9	Mitigation procedure for drought/low supply conditions?			Our raw water supply is provided by IID. Municipal water supplies aren't usually affected by drought. Low raw water supply could be a problem but not likely unless a major catastrophic event occurs.
10	Plan in the event of a disaster/emergency?			HPUD has an Emergency Response Plan.
Other Notes				

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	Heber PUD	Heber PUD
		Interviewee:		John A. Jordan
		Date of Interview:		Thursday October 28, 2010 (10:00 AM)
1	What is your primary role?			General Manager
2	What are your land use policies as they relate to flood control?			We are a Special Dist. (under County jurisdiction)
3	Is there a plan that identifies future capital investments for stormwater?			Town of Heber Drainage Master Plan (Nolte - 2006)
4	Do you have a Master Drainage/Stormwater Plan?			Town of Heber Drainage Master Plan (Nolte - 2006)
5	Do you have design criteria pertaining to stormwater management facilities?			As outlined in County of Imperial Planning & Development guidelines.
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			As outlined in County of Imperial Planning & Development guidelines.
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			I don't know - have to ask Imperial County Public Works Dept. (760-482-4462).
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			Yes. Refer to Town of Heber Drainage Master Plan (Nolte - 2006).
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			N/A.
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			HPUD has no improvements planned - refer to County of Imperial Public Works (760-482-4462).
9	Do you have any combined stormwater/sewer (CSO) facilities?			HPUD does not - don't know about County of Imperial Public Works.
	Do you have any plans to separate them?			N/A.
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			HPUD does not - don't know about County of Imperial Public Works.
	Are soil conditions such that infiltration or recharge is practical?			Don't know - refer to Imperial County Public Works (760-482-4462).
12	What are the biggest constraints to stormwater			Connection to IID drain ditches.
Other Notes				Stormwater was covered under the Town of Heber Drainage Master Plan (Nolte - 2006) that was commissioned by Imperial County PW.

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	Heber PUD WWTP	Heber PUD WWTP
	Interviewee:	Graciela Lopez	John A. Jordan
Questions:	Date of Interview:	June 17, 2009	Oct. 28, 2010
1	What is your primary role?	Heber PUD Finance Manager	General Manager
2	Size of WWTP	0.81 (Plant built in 2000)	When the plant was originally constructed it had a capacity of .81MGD. During our expansion project it was discovered that the plant only has a current capacity of .65MGD (this is because of design).
	Any capacity issues; how close are you to the use of the design capacity?	No capacity issues at this time, average of about 0.5 MGD	HPUD currently has an average dailey capacity of .5MGD.
	Are you under any compliance requirements?	No compliance issues at this time. Previously, up to about a year ago, had compliance issues with E-coli. Started having problems when reached 0.6MGD, especially in Winter (slower sludge drying) solution is in place now - geotube in place along with few other changes…	Most pressing issue is lack of funding for the expansion/construction of the planned new WWTP (upgrade treatment and expand to 1.2MGD capacity).
3	What were total and monthly annual total flows from the plant in 2008?	Believes between 0.5 MGD and less. Summer typically higher than winter.	Currently the avg. daily flow is .5MGD.
4	What is your level of treatment?	Currently Primary. Have plans to upgrade to secondary but also trying to get tertiary water but will be if get contract with Ormat.	<- Refer to Graciela Lopez' answer.
	Any land disposal or reuse?	No	No.
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?	Project plan, full design completed, is to go to 1.2 MGD capacity. Have applied for funds already with different agencies (difficult to charge customers more), cost expected to be about 12.5 million dollars.	<- Refer to Graciela Lopez' answer.
6	What level of treatment and treatment process are anticipated?	Secondary with ultraviolent.	<- Refer to Graciela Lopez' answer.
7	What is your planning horizon?	2016	Sort of an open question - planning horizion for what? Raw sewage collection, treatment or discharge?
8	Is there a plan that identifies what future capital investments would be for the plant?	For current plan have applied for funding with several agencies including USDA and pre-application in to state revolving fund. Tomorrow, Thursday June 18th, there is public hearing to get rate increase approved.	<- Refer to Graciela Lopez' answer.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Plan to start build in 2010 or 2011 - Depends on financing. Expect upgrades to be completed in 18 months once started.	Any expansion/construction depends on financing. The current planned project can't be done in phases and this creates a special financing problem. Without financing to do the entire project HPUD may have to do some temporary upgrades to meed regulatory requirements until full funding can be obtained.
9	Any plans for reuse?	Currently in discussion with Ormat, who is considering using reclaimed water for their cooling towers. Heber has submitted quality of water information to Ormat. They are looking for money but it is expected they will get it. If it does not work out with Ormat still under consideration to try to reuse water for irrigations of parks.	<- Refer to Graciela Lopez' answer.
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Yes (see above)	Yes. Currently negotiating with local energy company. And at some time there will be demand by other users.
	From your perspective, what do you envision the future of treated wastewater effluent would be?		All treated WW will be reused in some way. Either by other entities, farming or municipal reuse (either by retreating for potable water or for parks etc.).
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	California has several regulations that would have an impact and there are sometimes "surprises" such as changes to stricter rules.	As long as there is an EPA and CalEPA there will be more regulations (not all of them good). Also controlled by State Water Board regulations.
	What are the biggest constraints to reuse?		
Other Notes		(Noted) Overall: John Jordan may have more information or details to add but is out of the office until Monday June 22nd.	

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	City of Holtville	City of Holtville
		Interviewee:		Justina Arce
		Date of Interview:		18-Aug-10
1	What is your primary role?			Senior Planner for the Holt Group
2	Data current as of?		2006	2010
	Current treatment capacity is XXMGD?		3.15MGD	
	Current raw water storage capacity?		11.3MG	City has 3 pond rehabilitation projects under a USDA grant. So far have repaired one pond - berms. Lined3 MGD daily demand - 3 days of storage
	Current raw water pump station capacity?			
	Current clear water storage capacity?		1.5MG	2.4 MG Tank finished earlier this year…earthquake destroyed old 1.5 - now at 1.4
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?		1.5MGD	3 MGD peak hours
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?		Fire flows and residual pressures at the Barbara Worth Country Club are not adequate. Cast Iron Piping (CIP) deteriorating. Valve and fire hydrant deficiencies.	No improvements to this..City limits have undersized lines - poor fire flow.
	Types of pipe in system		PVC, AC, CIP, AIP	
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?		6.0MGD	
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?		4.0MG + 1.0MG	
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?		1.9MGD	same - no major developments Inc. city limit is built out
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Water Master Plan	
	When do you anticipate making upgrades/improvements,			
8	What is your planning horizon?		2020	2020 - storage capacity next year
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
Other Notes				Priority Projects Identified 1) Master Water Plan - $75k

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	City of Holtville	City of Holtville
		Interviewee:		Justina Arce
		Date of Interview:		8/18/2010
1	What is your primary role?			Senior Planner for the Holt Group
2	What are your land use policies as they relate to flood control?		Evaluate hazardous flood locations and inform the public and proposed developers.	The City has adopted development standards for stormwater need, no master plan (would cost approx. $60k)
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction.	No. Developer driven.
4	Do you have a Master Drainage/Stormwater Plan?			No
5	Do you have design criteria pertaining to stormwater		Yes	No, there is no infrastructure
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		None mentioned	100-year
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			No
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Several piped systems are undersized or do not funciton adequately. Majority of runoff is conveyed via gravity surface flow street system.	No
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Multiple locations for piped systems. Flooding is main way flow is conveyed in most of City (i.e. surface street flow).	There are definitely areas in the community that flood. Primarily next to a school district where stagnant water pools as a result of lack of drains. Another issue is that about 60% flows into industrial area from a lack of a proper drainage and conveyance system. A preliminary engineering report identified a need for a large retention basin to prevent flooding ~ $6M
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs	5-years or as funds become available
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	Yes
	Do you have any plans to separate them?			Yes
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		Yes. Some runoff directed to retention basins for infiltration, but most stormwater discharged to Alamo River	No
	Are soil conditions such that infiltration or recharge is		Yes	No.
12	What are the biggest constraints to stormwater conveyance?			Major pipeline is non existant in a number of areas in community- also big need for a pump station. In town flows are adequate, outside of the center of town but within the city boundaries the conveyance systems are inadequate.
Other Notes				Stormwater was covered under the Town of Heber Drainage Master Plan (Nolte - 2006) that was commissioned by Imperial County PW.

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
Questions:	Plant:	City of Holtville Municipal WWTP	City of Holtville Municipal WWTP
	Interviewee:	Frank Cornejo	Justina Arce
	Date of Interview:	June 23, 2009	August 18, 2010
1	What is your primary role?	Waterworks Supervisor	Senior Planner for the Holt Group
2	Size of WWTP	0.85	1.3 M
	Any capacity issues; how close are you to the use of the design capacity?	Not at this time	No growth in the City of Holtville if there were any larger subdivsions hard pressed to service - able to serve 350 homes.
	Are you under any compliance requirements?	In process of being issues a cease and desist for ammonia, heavy metals, few other things that did not meet NPDES requirements.	Under cease and desist status. Grant awarded to make improvements to become compliant. $ 1M grant from BECC. Need 50% matching funds. In violation due to pesticide infiltration from ag fields
3	What were total and monthly annual total flows from	Average flow of 0.6 to 0.65 MGD – been pretty consistent for while.	
4	What is your level of treatment?	Currently Secondary with UV disinfection.	Secondary
	Any land disposal or reuse?	No, only NPDES permitted disposal.	
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?	Compliance order to bring facility to current and upcoming regulations. Working with firm who specializes in design of WWTP facilities. Staff currently working on securing funding and moving forward with planning and design. Will be presented to region board	
6	What level of treatment and treatment process are anticipated?	Believe will still be Secondary with disinfection but would be much more efficient treatment method – new process – will use activated sludge and perhaps membranes leading to higher quality effluent.	City Engineer doesn't see how the implementation of RW will work - City Manager aggressively seeking alt channeling to Geothermal -Ormat. Also discussion of treating enough so that IID could take it into canal system.
7	What is your planning horizon?	Would like to initially expand to 1.2 MGD then a final expansion to 1.8 MGD – phased expansion with timeline depends on funding…	
8	Is there a plan that identifies what future capital investments would be for the plant?	Staff working a various avenues included USDA, grants through American Recovery Act, etc. A lot of paper submitted; believe some projects have got approval – mostly for corrections.	No USDA proposed grants, BECC funded by EPA -partnership with NADVAC that covers 100% prelim design costs - 30% implementation - still gaps..WWTP project City of Holtville Sanitary Sewer Outfall Project Not through the Amerian Recovery Act but through BECC. The grants have not been awarded construction funding.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	Would like try to secure funding this year and looking towards end of year to move forward with design and perhaps by end of 2010 to start expansion to 1.2 MGD, realistically may be later.	Not by the end of 2010 but 2012.
9	Any plans for reuse?	Trying to schedule meeting with National Rural Water Association. Also will meet to determine feasiblity of Holtville reuse alternative.	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Use for crop irrigation - crops that would not require increased treatment levels. Not aware of any talk to upgraded to tertiary treatment.	City Manager seeking alt channeling to Geothermal -Ormat. Also discussion of treating enough so that IID could take it into canal system.
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Yes. Don't know how feasible is since will take a significant infrastructure –initial capital. Possibly regional approach	
10	Any regulatory constraints associated with upgrading effluent quality to meet a new market?	Concerns of heads butting, that is regs or rules conflicting between Department of Public Health and Regional Board.	
	What are the biggest constraints to reuse?	Funding – infrastructure needs to be in place - pipeline, etc. The Holtville WWTP Facility is pretty remote from town – surrounded by Ag fields and in order to pump in back to city or industry like geothermal plant would need lot of distribution infrastructure. As far as use on crops would depend on type of crop farmers are planting or willing to plant (since considering application of current treatment level - Secondary with disinfection).	
Other Notes		Note: Call was over bad Cell phone connection.	Justina will provide BECC Grant Application and Project Description.
			Priority Projects Identified
			1) Wastewater Collection System Improvements - $3.3M
			2) Sewer Master Plan - $75k

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Gateway of the Americas	Gateway of the Americas
		Interviewee:		Ed Delgado
		Date of Interview:		28-Oct-10
1	What is your primary role?			Deputy Director of Public Works - Administration
2	Data current as of?		2007	2010
	Current treatment capacity is XXMGD?		.12MGD (as of 2005)	Same
	Current raw water storage capacity?		1.8MG	Same
	Current raw water pump station capacity?			
	Current clear water storage capacity?		1MG	Same
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?		0.95MGD	Same
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			Occassionalexceedance of water quality limits
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?		2.9MGD	Same
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			Service Area Plan, 2005
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			Currently undergoing Phse II expansion.
8	What is your planning horizon?		2025	Same
9	Mitigation procedure for drought/low supply conditions?			N/A
10	Plan in the event of a disaster/emergency?			
Other Notes			Gateway SAP (pdf) had broken link error messages in place of most capacity values ("Error! Not a valid link.")	PDF of Service Area Plan available if desired

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	Gateway of the Americas	Gateway of the Americas
		Interviewee:		Ed Delgado
		Date of Interview:		10/28/2010
1	What is your primary role?			Deputy Director of Public Works - Administration
2	What are your land use policies as they relate to flood control?		Parking areas designed to pond to a depth of 6in. During storm events.	Same
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction	Same
4	Do you have a Master Drainage/Stormwater Plan?		No.	Same
5	Do you have design criteria pertaining to stormwater management facilities?		Yes	Same
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		100-yr	Same
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Yes	Same
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs	Same
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	None
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		Retention basins designed to infiltrate water into ground, or discharge to Ash Canal or Alamo River.	Same
	Are soil conditions such that infiltration or recharge is practical?		Yes	Same
12	What are the biggest constraints to stormwater conveyance?			None
Other Notes				

Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	Gateway of the Americas WWTP	Gateway of the Americas WWTP
		Interviewee:	Ed Delgado	Ed Delgado
	Questions:	Date of Interview:	June 18, 2009	October 28, 2010
1	What is your primary role?		Administrative Analyst for County of Imperial.	Deputy Director of Public Works - Administration
2	Size of WWTP		0.2	Same
	Any capacity issues; how close are you to the use of the design capacity?		Consideration of expansion – not yet close capacity but CHP facility wants to tie in, which would increasing required capacity. See question 8.	Currently in Expansion Phase II
	Are you under any compliance requirements?		Not that aware of. None.	None
3	What were total and monthly annual total flows from the plant in 2008?		Unsure, contracted operator – Rocky Vandergriff might know. Unknown. Don't have anything current, but a study from 2005 listed inflow at approximately 14,000 gallons per day as measured by water meter readings.	Approximately 14,000 GPD
4	What is your level of treatment?		No Sure. Filtration and ultraviolet light disinfection.	Same
	Any land disposal or reuse?		No Sure.	None
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		Planned to happen in phases, currently in phase one of three phases for plant expansion. Not sure of phase 2 or 3 size. Planned to happen in 5 phases, currently in phase one. Ultimate planned capacity to reach 1.5 MGD with daily operational flows around 1.0 to 1.1 MGD	Same
6	What level of treatment and treatment process are anticipated?		Don't think any change in treatment level is planned. BIOLAC activated wastewater treatment lagoons, blower aeration chains, integral clarifiers, solar sludge dryer, backwashing filters, Ultraviolet lighting banks	Same
7	What is your planning horizon?		Not sure. Several years dependent upon growth rate and funding.	Same
8	Is there a plan that identifies what future capital investments would be for the plant?		Not sure. One conducted in 2005; one rate study due to commence in 1-2 months.	Service Area Plan, 2005
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		All contingent on funding – funding not yet identified. Will also be driven by growth rate of the area.	Currently in Expansion Phase II. Balance contingent on growth and funding.
9	Any plans for reuse?		No sure.	None
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		As part of prelim CHP tie-in study was consideration of using for irrigation. No other plans for reuse.	Same
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		Don't envision in immediate future – for irrigation if anything	Same
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		Not sure. Regulatory compliance could prove cost prohibitive and limit expansion. Biggest constraints to reuse include lack of practical knowledge in the area and costs.	Same
	What are the biggest constraints to reuse?			Same
	Other Notes		Additions or corrections provided by Ed (via email) June 23rd and June 24th. Also when plant operator available will ask about average flows and treatment level (current and furture)	

Potable Water Inventory

		Known Conditions	Updated Conditions
Questions:	Location	City of Imperial	City of Imperial
	Interviewee:		
	Date of Interview:		
1	What is your primary role?		
2	Data current as of?	2008	
	Current treatment capacity is XXMGD?	7MGD	
	Current raw water storage capacity?	10MG	
	Current raw water pump station capacity?	2 x 1.5MGD + 2 x 3.5MGD; Total of 10.0MGD	
	Current clear water storage capacity?	3 x 2.0MG; Total 6MG	
	Current clear water pump station capacity?	3 x 3.6MGD; Total 10.8MGD	
3	Current Average Daily Demand (ADD)?	1.8	
	Current Maximum Day Demand? at Peak Hour?		
4	Do you have a model of the existing distribution system?	Yes - BJ Engineering & Surveying Inc.	
	Current system deficiencies (low pressure/low flow/WQ)?		
	Types of pipe in system	AC(~46% of total system) and PVC	
	Program for replacing old/damaged pipe reaches?		
5	Future treatment capacity is XXMGD?	7MGD	
	Future raw water storage capacity?		
	Future raw water pump station capacity?		
	Future clear water storage capacity?	10MG	
	Future clear water pump station capacity?		
6	Future Average Daily Demand (ADD)?	9.3MGD	
	Future Maximum Day Demand? at Peak Hour?		
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?		
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)	Master Plan for the Water Distribution System, May 2006	
	When do you anticipate making upgrades/improvements,	As development occurs	
8	What is your planning horizon?	2030	
9	Mitigation procedure for drought/low supply conditions?		
10	Plan in the event of a disaster/emergency?		
Other Notes			

Stormwater Inventory

			Known Conditions	Updated Conditions
		Plant:	City of Imperial	City of Imperial
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?		No. Dependent upon construction	
4	Do you have a Master Drainage/Stormwater Plan?			
5	Do you have design criteria pertaining to stormwater		Yes	
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		100-yr	
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		Yes, however City systems discharge to IID drains which were not sized for an urbanized watershed.	
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		Detention/retention facilities used to restrict storm flows into IID drains.	
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		As development occurs	
9	Do you have any combined stormwater/sewer (CSO) facilities?		None mentioned.	
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is			
12	What are the biggest constraints to stormwater			
	Other Notes			

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
Questions:	Plant:	City of Imperial Water Pollution Control Plant	City of Imperial
	Interviewee:	Jackie Loper	
	Date of Interview:	June 16, 2009	
1	What is your primary role?	Maintenance Supervisor	
2	Size of WWTP	Currently 2.4 MGD Capacity.	
	Any capacity issues; how close are you to the use of the design capacity?	No, currently using about 1.4 to 1.6 MGD.	
	Are you under any compliance requirements?	No.	
3	What were total and monthly annual total flows from	Currently using about 1.4 to 1.6 MGD.	
4	What is your level of treatment?	Secondary [with disinfection]… Understanding from what told is that with changing regulations will be classified as grade 3 plant.	
	Any land disposal or reuse?	No (all NPDES disposal)	
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?	Most components of plant build for expansion to 5 MGD relatively easily.	
6	What level of treatment and treatment process are anticipated?	At the current plant the type and level of treatment will be similar to what's in use. The Keystone plant will be MBR treatment.	
7	What is your planning horizon?	2010/2011 (before housing slowdown) currently 2011/2012 we need to have plans in place by these dates to allow for construction time in order to meet needs of the public by 2015.	
8	Is there a plan that identifies what future capital investments would be for the plant?	The City currently has a rate study under way to address the current and future needs for both the existing plant as well as the Keystone plant.	
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?	All plans need to be in place in the next 3 years in order to have enough time for constructions, to be operational in time for the public needs.	
9	Any plans for reuse?	No, not with this facility. (City leading plans for Keystone/Mesquite Lake reclamation facility).	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.	Currently there are no plans for the reuse water, but the City is working with prospective partner to develop the reuse and have a market for the reuse water by the time that the treatment plant [Keystone] is operational.	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?	Public or private reuse of the water i.e. Landscape, commercial or industrial uses.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?	None at this time.	
	What are the biggest constraints to reuse?	Developing a viable and profitable market	
Other Notes		Additions or corrections provided by Jackie June 19th.	

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Niland	Niland
		Interviewee:		
		Date of Interview:		
1	What is your primary role?			
2	Data current as of?			
	Current treatment capacity is XXMGD?			
	Current raw water storage capacity?			
	Current raw water pump station capacity?			
	Current clear water storage capacity?			
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			
	When do you anticipate making upgrades/improvements, what is the time frame			
8	What is your planning horizon?			
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
Other Notes			See Calipatria for Potable Water	See Calipatria for Potable Water

Stormwater Inventory

		Known Conditions	Updated Conditions
Questions:	Plant:	Niland	Niland
	Interviewee:		
	Date of Interview:		
1	What is your primary role?		
2	What are your land use policies as they relate to flood control?		
3	Is there a plan that identifies future capital investments for stormwater?		
4	Do you have a Master Drainage/Stormwater Plan?		
5	Do you have design criteria pertaining to stormwater management facilities?		
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?		
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?		
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?		
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?		
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		
9	Do you have any combined stormwater/sewer (CSO) facilities?		
	Do you have any plans to separate them?		
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?		
	Are soil conditions such that infiltration or recharge is practical?		
12	What are the biggest constraints to stormwater conveyance?		
Other Notes			No stormwater system to speak of

Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	Niland WWTP	Niland WWTP
		Interviewee:	James Strang	David Godsey
	Questions:	Date of Interview:	June 26, 2009	October 27, 2010
1	What is your primary role?		Lead Operator	Local Operation Superintendent
2	Size of WWTP		0.5	0.5
	Any capacity issues; how close are you to the use of the design capacity?		No capacity issues, average flows of about 0.175 MDG to .18 MGD.	No capacity issues, average flows have dropped to about 0.08MGD
	Are you under any compliance requirements?		Recently got a Cease and Desist order from Regional Water Quality Control Board because of copper levels. Understand that have a couple of years to correct the problem.	Copper levels still an issue. Difficult to bring discharges into compliance as they have only primary level of treatment.
3	What were total and monthly annual total flows from the plant in 2008?		Average flows of about 0.175 to 0.18 MDG. A couple of years ago the collection system was rehabilitated – relined to correct groundwater infiltration problems – rehab reduced flows (prior to, about 3 years ago average was 0.23 to 0.24 MGD).	
4	What is your level of treatment?		Primary – bar screen and ponds. Sodium hypochlorite for disinfection in contact chamber then chlorine neutralized before leaves plant.	No advanced bio; Ponds w/ flouridation/chlorination
	Any land disposal or reuse?		No	No.
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		None at this time – appears population has gone down since the number of connections has gone down.	
6	What level of treatment and treatment process are		No changes to treatment level or processes are planned at this time.	
7	What is your planning horizon?		"Poor right now, just trying to get by" – currently only 2 of 6 areas of the plant are operating, one pump's been down a while other just gave out so currently running a rental pump. Just received approval from USDA for grant money to get new lift station, bar screen and believe a new generator. Also getting some help from the County for aeration equipment.	
8	Is there a plan that identifies what future capital investments would be for the plant?		No real plan that aware of rely a lot on USDA and County help.	No. Though they got an Economic Development Department grant to help with infiltration issues. Liners were placed in the lines. No CIP for collection system.
	When do you anticipate making upgrades, what is the		This year for maintenance / new equipment discussed above.	
9	Any plans for reuse?		No plans currently but when they visited last, the Regional board recommended reuse when last visited. Indicated that will need to find another way to discharge water, not to Salton Sea- because regs are going to become more stringent over time and discharging to Sea would be harder.	
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		Regional board recommended irrigation, possibly alfalfa or even just spraying out to dry/desert land behind plant – no benefit but alternative disposal...	
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		If money was there to increase plant treatment level and set up distribution system then yes.	
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		Always regulations. Plant manager, David Godsey (455-3439), might have better information.	
	What are the biggest constraints to reuse?			
	Other Notes			Niland SD may dissolve due to funding issues (residents not paying taxes that NSD receives their funding from). Key project may involve connecting Niland to Calipatria's WWTP

Potable Water Inventory

			Known Conditions	Updated Conditions
Questions:		Location	Seeley	Seeley
		Interviewee:		Anthony Munger
		Date of Interview:		
1	What is your primary role?			
2	Data current as of?		Capacity - 2006; Demand - 2003	40479
	Current treatment capacity is XXMGD?		0.75MGD	Same
	Current raw water storage capacity?			2MG currently, though additional 5MG is being constructed
	Current raw water pump station capacity?			600gpm
	Current clear water storage capacity?		0.90MGD	1.3MG will be available at the beginning of the year
	Current clear water pump station capacity?		2000gpm	Same
3	Current Average Daily Demand (ADD)?		0.245MGD	0.29 MGD
	Current Maximum Day Demand? at Peak Hour?		0.567MGD (MDD); 850gpm(PHD)	No Record for Peak
4	Do you have a model of the existing distribution system?			Yes, there is a model
	Current system deficiencies (low pressure/low flow/WQ)?			Old pipes.
	Types of pipe in system			AC
	Program for replacing old/damaged pipe reaches?			Received a grant for pipe replacement. Will begin implementation Jan. 2011
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			2-500k gal tanks (1M gal total)
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?		0.426MGD	Same
	Future Maximum Day Demand? at Peak Hour?		0.985MGD(MDD); 1500gpm (PHD)	Same
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)		Master Plan for the Water Distribution System for the City of Westmoreland (Holt Group 1997)	Raw water ponds are in the process of being expanded and lined. Clear storage will have been upgraded by Jan 2011. Distribution system pipe replacement beginning Jan 2011.
	When do you anticipate making upgrades/improvements, what is the time frame?			Last plan update was 2003.
8	What is your planning horizon?		2020	2020
9	Mitigation procedure for drought/low supply conditions?			Community outreach is the only means of mitigation in drought/low supply/emergency conditions (post office, letters, etc.)
10	Plan in the event of a disaster/emergency?			Secondary power source can run all treatment and distribution systems. If source is unavailable, El Centro or naval base could assist w/ emergency pipelines
Other Notes				Distribution system replacements will begin Jan 2011.

Stormwater Inventory

			Known Conditions	Updated Conditions
Questions:		Plant:	Seeley	Seeley
		Interviewee:		
		Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood control?		Several areas directly adjacent to New River are subject to flooding. County has Flood Damage Prevention Ordinance.	
3	Is there a plan that identifies future capital investments for stormwater?			
4	Do you have a Master Drainage/Stormwater Plan?			County owned.
5	Do you have design criteria pertaining to stormwater management facilities?			
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
9	Do you have any combined stormwater/sewer (CSO) facilities?			
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is practical?			
12	What are the biggest constraints to stormwater conveyance?			
Other Notes				No stormwater system to speak of

Wastewater Inventory

			KNOWN CONDITIONS	UPDATED CONDITIONS
		Plant:	Seeley County WWTP	Seeley County WWTP
		Interviewee:	Hector Orozco	Anthony Munger
	Questions:	Date of Interview:	June 24, 2009	October 28, 2010
1	What is your primary role?		Chief Operator	
2	Size of WWTP		0.2	Same
	Any capacity issues; how close are you to the use of the design capacity?		Currently below capacity; 0.1 to 0.15 MGD.	Not full. Capacity @~50%
	Are you under any compliance requirements?		Just standard NPDES requirements.	Standard NPDES Requirements
3	What were total and monthly annual total flows from the plant in 2008?		As above around 0.1 to 0.15 MGD, more flow in winter.	Same
4	What is your level of treatment?		Secondary with UV disinfection.	Same
	Any land disposal or reuse?		No. NPDES permitted discharge only – to River.	Same
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		No current plans for increasing capacity.	Current capacity meets anticipated need
6	What level of treatment and treatment process are anticipated?		Not that aware of.	None. In talking w/ solar project, they would pay to upgrade to tertiary treated water in exchange for receiving a certain amount of treated effluent.
7	What is your planning horizon?		Not aware of, not involved with.	N/a
8	Is there a plan that identifies what future capital investments would be for the plant?		No involved with – Sandra Esitgoy might be better contact for some of these questions (call main CWD number).	No Plan. Pipes fixed as they break.
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		N/A	
9	Any plans for reuse?		No. Fine with how things are done right now, meeting requirements and have good communication with regional board.	Without solar project, no plans for reuse. W/ solar project, yes.
	Is there a current or future market for WWTP flows? Primarily Ag? Industrial? Etc.		Not aware of any... There are small parks in town…	Yes. Water for SES Solar Two facility. Other possible users include existing development and new development.
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		Can't say.	Will provide 0.15 - 0.20 MGD of reclaimed water for use in construction and operation activities to SES Solar Two facility (non-potable only).
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		No.	Title 22 Compliance. Plant will be upgraded by SES Solar Two facility in exchange for access to recycled water. If given the go-ahead, may be completed 2011-2012.
	What are the biggest constraints to reuse?		Would require more testing and treatment.	
Other Notes			See "Aside" note under Holtville	No identified priority projects. Replacement of existing collection system

Potable Water Inventory

			Known Conditions	Updated Conditions
		Location	Westmoreland	Westmoreland
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	Data current as of?			
	Current treatment capacity is XXMGD?			
	Current raw water storage capacity?			
	Current raw water pump station capacity?			
	Current clear water storage capacity?			
	Current clear water pump station capacity?			
3	Current Average Daily Demand (ADD)?			
	Current Maximum Day Demand? at Peak Hour?			
4	Do you have a model of the existing distribution system?			
	Current system deficiencies (low pressure/low flow/WQ)?			
	Types of pipe in system			
	Program for replacing old/damaged pipe reaches?			
5	Future treatment capacity is XXMGD?			
	Future raw water storage capacity?			
	Future raw water pump station capacity?			
	Future clear water storage capacity?			
	Future clear water pump station capacity?			
6	Future Average Daily Demand (ADD)?			
	Future Maximum Day Demand? at Peak Hour?			
	Future Maximum Day Demand at Peak Hour plus Fire Conditions?			
7	Is there a plan that identifies future capital investments for the treatment facility and/or the distribution system? (General Plan, Master Water Plan, Service Area Plan, etc.)			
	When do you anticipate making upgrades/improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
8	What is your planning horizon?			
9	Mitigation procedure for drought/low supply conditions?			
10	Plan in the event of a disaster/emergency?			
	Other Notes			

Stormwater Inventory

			Known Conditions	Updated Conditions
		Plant:	Westmoreland	Westmoreland
		Interviewee:		
	Questions:	Date of Interview:		
1	What is your primary role?			
2	What are your land use policies as they relate to flood			
3	Is there a plan that identifies future capital investments for stormwater?			
4	Do you have a Master Drainage/Stormwater Plan?			
5	Do you have design criteria pertaining to stormwater management facilities?			
	If so, what design storm return frequency is required (100-yr, 50-yr, 10-yr, etc.)?			
6	Do you have an electronic model of the storm drain system and/or floodplain (if near a river)?			
7	Does your existing storm drain system have adequate conveyance capacity to provide flood protection?			
	If not, have you identified any locations where flooding, conveyance, etc. has been or has become an issue?			
8	When do you anticipate making improvements, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?			
9	Do you have any combined stormwater/sewer (CSO) facilities?			
	Do you have any plans to separate them?			
10	Do you have a goal or an existing program for storm water capture and reuse, infiltration, or groundwater recharge?			
	Are soil conditions such that infiltration or recharge is practical?			
12	What are the biggest constraints to stormwater conveyance?			
Other Notes				

Wastewater Inventory

		KNOWN CONDITIONS	UPDATED CONDITIONS
	Plant:	Westmoreland	Westmoreland
	Interviewee:		
Questions:	Date of Interview:		
1	What is your primary role?		
2	Size of WWTP		
	Any capacity issues; how close are you to the use of the design capacity?		
	Are you under any compliance requirements?		
3	What were total and monthly annual total flows from the plant in 2008?		
4	What is your level of treatment?		
	Any land disposal or reuse?		
5	What is the anticipated need and planned future design capacity (Annual total, monthly)?		
6	What level of treatment and treatment process are anticipated?		
7	What is your planning horizon?		
8	Is there a plan that identifies what future capital investments would be for the plant?		
	When do you anticipate making upgrades, what is the time frame (e.g; 1 year, 3 yrs, 5 years)?		
9	Any plans for reuse?		
	Is there a current or future market for WWTP flows?		
	From your perspective, what do you envision the future market of treated wastewater effluent would be?		
10	Do you envision any regulatory constraints associated with upgrading effluent quality to meet a new market?		
	What are the biggest constraints to reuse?		
Other Notes			