4.13 WATER SUPPLY

4.13.1 INTRODUCTION

This section evaluates the adequacy of existing and planned future water supplies to serve the project and to serve other water users relying on this water. Municipal water for the site is proposed to be provided by the City of Stockton. In order to evaluate current and forecasted water supplies and demands for the City and its service area, this section incorporates information from numerous sources including the City of Stockton Urban Water Management Plan (City of Stockton 2005a) (UWMP), the Water Supply Evaluations for the General Plan Update Preferred Alternative (City of Stockton 2006) (WSE), and the Delta Water Supply Project Feasibility Report (City of Stockton 2003) (DWSP Feasibility Report), and DWSP Environmental Impact Report (City of Stockton 2005b). The City of Stockton 2035 General Plan EIR, including the Water Supply Evaluation, has been challenged in court over alleged CEQA violations. It is unknown whether the City's EIR and WSE will be upheld because the case is still pending in the Superior Court of San Joaquin County (Case No. CV 034370). Nevertheless, the 2035 General Plan EIR, including the Water Supply Evaluation, is presumed valid absent a contrary ruling from the court. The General Plan EIR provides recent and pertinent information useful to the evaluation of the adequacy of existing and planned future water supplies to serve the project and other water users.

4.13.2 ENVIRONMENTAL SETTING

CLIMATE

The project area has a typical Mediterranean climate with wet, cool winters, and warm, dry summers. Most of the rainfall occurs between November and April with an average annual rainfall of 13.7 inches. The 10-year, 48-hour estimated precipitation (rainfall expected over 48-hours during a 10-year storm event) for Stockton is 3.12 inches (San Joaquin County 1973), and the 100-year, 24-hour estimated precipitation is 3.5 inches (Western Regional Climate Center 2003). Elevations on the project site range from 2 to 7 feet below mean sea level (msl). Slopes are nearly level (0 to 2%). The project site drains toward the southeast to an elevation of about 2 feet below msl near the east perimeter of the project site to an elevation of about 7 feet below msl near the west perimeter.

EXISTING WATER SERVICE

Existing facilities on the Northern California Youth Correctional Center (NCYCC) site are supplied water by on-site groundwater wells. There are four wells on the site three of which are active. Each well produces up to approximately 1,500 gpm. In addition, there are three 250,000-gallon water storage tanks, three booster pump stations including one fire pump, one 1,000-gallon hydropneumatic tank, and a sodium hypochlorite feed system. The pumped water is treated with sodium hypochlorite and supplied to the existing NCYCC facilities for domestic water supply. Existing water demands at the NCYCC site include potable water requirements (e.g., consumption, bathing, toilets, and kitchen use), landscape irrigation, and other miscellaneous uses including fire protection. Use of water at the site has changed over time, largely in response to fluctuations in the number of wards. In 1996, the incarcerated population at the site was close to 5,000 (3,960 wards at NCYCC and 950 inmates at the former Northern California Woman's Facility (NCWF), which is now a training facility, the Richard A. McGee Correctional Training Center Annex, or CTCA). Between 2001 and 2006 the population at the NCYCC site averaged 2,650. In 2001, an approximately "average" population year, there were 603 inmates at the NCWF and 1,633 wards at the NCYCC (2,236 total). At that time, the average daily water demand for these facilities was 0.6 million gallons per day (mgd), and the average water usage per-inmate per-day was approximately 268 gallons per-inmate per-day (gpid).

Each existing groundwater well has a capacity of approximately 2.16 mgd, and the total system capacity is 6.48 mgd. Groundwater from the wells on the NCYCC site is treated, stored in three 250,000 gallon above-ground tanks, and is delivered to the project site in a water line that splits into two 8-inch diameter lines. One 8-inch line

supplies treated water for potable and operational use and the other line is used for irrigation. If NCYCC loses utility power, the water system is powered by a dedicated emergency backup generator located adjacent to the booster pump station (CDCR 2007). One of the wells is on standby due to contamination of the groundwater presumably from the nearby municipal landfill on Austin Road. There is concern that the contamination plume will affect the other wells on the site. As described below, the proposed project would connect to City of Stockton municipal supplies so that it would not rely on this well water.

Water systems in the City of Stockton Metropolitan Area (COSMA), which encompasses the project site, use a combination of treated surface water provided by Stockton East Water District (SEWD) and pumped groundwater to supply water to the 1990 General Plan boundary area. Stockton water purveyors include the City of Stockton Municipal Utilities Department, California Water Service Company, and the San Joaquin County Maintenance District. SEWD operates COSMA's only water treatment plant, which has the capacity to treat 50,400 acre-feet per year (afy) and produces an average of 39,222 afy of treated surface water from the Calaveras (via New Hogan Reservoir) and Stanislaus (via New Melones Reservoir) Rivers. In 2004, total water demand for COSMA was 68,714 afy. Water demand is expected to increase from the current demand of 68,714 afy to 85,330 afy by 2015 (buildout of the 1990 General Plan) and to 156,083 afy by 2035 (buildout of the General Plan Update). Availability of surface water to COSMA ranges from about 104,100 afy of firm supply in a wet year to 30,000 afy in a dry year. Sustainable groundwater yield has been determined to be at 0.75 AF/acre/year. This is the level at which groundwater can be pumped from the underlying groundwater basin without resulting in adverse drawdown effects to the groundwater table. Groundwater extraction ranges from a planning yield of 0.6 AF/acre/year to as high as 1.0 AF/acre/year (Stockton 2006).

CITY OF STOCKTON WATER SUPPLY EVALUATION

To evaluate water supply for the General Plan Update, the City conducted a Water Supply Evaluation (WSE), which was intended to meet the demands of Senate Bill 610 (Water Code, § 10910 et seq.). The General Plan Update EIR also included a Background Report. The Public Facilities and Services section of the Background Report provided further detailed information on water supply and delivery associated with the General Plan Update. The Stockton 2035 General Plan Update EIR's analysis of water supply (General Plan Update EIR, pp. 9-1 through 9-17); WSE; the cumulative impact analysis (General Plan Update EIR, pp.15-4 through 15-5, 15-19 through 15-21; Background Report, pp. 9-2 through 9-61); Master Response #3 (General Plan Update Final EIR (Final EIR) pp. 3-4 through 3-12); Master Response # 5 (Final EIR pp. 3-14 through 3-25); responses to comment letter A16 (Final EIR pp. 3-40 through 3-43); response to comment I-1-1 (Final EIR p. 3-97); responses to comments I10-55 through I10-63 (Final EIR pp. 3-140 through 3-144); responses to comments I10-84 through I10-87 (Final EIR pp. 3-149 through 3-150); responses to comment I11-5 through I11-12 (Final EIR p. 3-156 through 3-159); responses to comments I12-2 through I12-17 (Final EIR pp. 3-161 through 3-165); responses to comments I19-4 through I19-14 (Final EIR pp. 3-190 through 3-192); responses to comments I28-1 through I28-30 (Final EIR pp. 3-199 through 3-200) are hereby incorporated into this EIR for the Weston Ranch Towne Center project as though set forth herein in full. (CEQA Guidelines, § 15150.) The incorporated portions of the 2035 General Plan Update EIR, including the WSE and Background Report are available for review at the City of Stockton Community Development Department, Planning Division, located at 345 N. El Dorado Street, Stockton, CA.

The WSE determined that the COSMA water purveyors (City of Stockton Municipal Utilities Department, California Water Service Company, and the San Joaquin County Maintenance Districts) cannot currently support the full extent of population growth assumed to occur as part of the General Plan Update without the initial phase of the Delta Water Supply Project (DWSP) (30 mgd) and the upgrade of the SEWD WTP to 60 mgd. The DWSP, which is expected to be in operation by 2010/2011, along with other available sources (that include water from the SEWD WTP upgrade) will be a viable water supply for meeting the General Plan Update's buildout water demand. The water purveyors made this determination based on the information provided in the WSE and on the following specific facts.

The existing near-term and long-term reliable supplies of SEWD surface water supplies, non-potable water supplies, and indigenous groundwater supplies can deliver a sustainable reliable water supply without significant environmental effects and/or affecting the current stabilization of the groundwater basin underlying the COSMA (Stockton 2006).

The existing and future conjunctive use program of using surface water and each of the water purveyor's groundwater supplies has been extensively analyzed as part of the DWSP Feasibility Report and EIR and as part of the WSE. All studies show that sufficient water rights and available groundwater supplies will exist for the level of water demand contemplated under the General Plan Update.

The General Plan Update area, including the proposed project area within the COSMA, will be served by water supplies made available through the existing and planned future conjunctive use program within the COSMA water purveyors' service areas.

The diversion structure, raw water pipeline, treatment plant, and treated water pipeline elements of the DWSP are necessary water supply elements in meeting the General Plan Update water demands. For more details on the status of the DWSP, please see the discussion later in this chapter.

New groundwater facilities are necessary to fully implement the conjunctive use program that is currently in effect and contemplated with operation of the DWSP. The use of new wells will take place only in the dry and critical years when SEWD surface water supplies are curtailed, and in no case would groundwater extractions affect the long-term sustainability of the groundwater basin and existing wells (Stockton 2006). In summary, the COSMA has met and expects to be able to continue to meet (during the planning period of the new General Plan) annual demands during differing hydrologic periods with surface water, groundwater, water conservation, and other potential water supplies such as non-potable supplies from local communities, raw surface water from local irrigation districts, and water from active groundwater storage projects. Currently, the City is pursuing raw surface water transfer agreements with local irrigation districts and municipalities and possible use of tertiary treated recycled water from the City of Lodi for use as a non-potable source for irrigation of public landscape areas. Potable surface water transfer supplies would be diverted for treatment at the SEWD WTP or the DWSP WTP. Water transfers would require mutually agreeable contract terms between the City and another entity transferring water and would require approval from DWR. Water purchases, treatment facilities, and conveyance infrastructure would be funded locally through a combination of rates and fees. Timing of water transfers would coincide with water demands such that they do not outpace current supplies through SEWD or the City's water rights.

COSMA Service Area

The City of Stockton is located in central San Joaquin County, south of Lodi and north of Manteca. The City is the public water system that would provide retail domestic water to the CPR project. The service area of the City is equivalent to the borders of the City itself. The City is located near to the Sacramento-San Joaquin Delta. The City updated and adopted its new general plan in December 2007. The preferred land use alternative of the general plan update encompasses all of the area inside the City Limits, the existing Sphere Of Influence (SOI) area, and additional unincorporated land areas that may influence future planning efforts. These existing boundaries extend to Armstrong Road and Live Oak Road on the north; portions of State Route 99 and the Stockton Diverting Canal, and Jack Tone Road to the east; and Roth Road on the south. The western boundary is formed by several features including a portion of the San Joaquin River, State Route 4, Burns Cutoff and Bishop Cut (Stockton 2006). The project site is in currently unincorporated central San Joaquin County, but is within the southeastern boundary of the City's Municipal Services Boundary, which is contiguous with the 2035 General Plan planning area (see Exhibit 4.1-1).

EXISTING AND FUTURE WATER SUPPLY

Groundwater Supply

The City, which would provide water to the proposed project, overlies the San Joaquin Valley Groundwater Basin, which lies within the Great Central Valley Basin. Overdraft of groundwater has occurred in the basin, with groundwater quality of the basin affected by saltwater intrusion from the Delta and the use of pesticides and fertilizers. Within the San Joaquin River Basin, both groundwater and surface water (rivers, streams, canals, and reservoirs) are significant water sources for both urban and agricultural users. In the past, the groundwater basin underlying San Joaquin County has been classified by the California Department of Water Resources as being in overdraft, especially in the northeastern portion of the County. The COSMA, however, has been instrumental through its voluntary participation in funding an existing conjunctive use program for the portion of the basin underlying the COSMA, in stabilizing groundwater elevations. No significant declines have been recorded since the late 1980's. In addition to its historical contributions, the COSMA's long-term plan for preventing overdraft of the groundwater basin is embedded in the objectives of the proposed future DWSP to insure systematic, incremental implementation of the on-going conjunctive use program to provide a benefit to the groundwater basin. This benefit extends beyond the political boundaries of the City.

Groundwater in the COSMA is used if surface water supplies are insufficient to meet water demands. Groundwater is managed for long-term sustainability and supply through conjunctive use with surface water supplies described below. The City has determined that sustainable groundwater yield is 0.75 AF/acre/year, equivalent to a groundwater yield of approximately 50,000 afy. Groundwater extraction ranges from a planning yield of 0.6 AF/acre/year to as high as 1.0AF/acre/year. Based on available monitoring data, the current extraction rate appears to be at or slightly above the sustainable yield of the groundwater basin (City of Stockton Municipal Utilities District 2006, City of Stockton 2006).

Surface Water Supply

Water supplies to the City are obtained from three sources, which rely on a combination of surface and groundwater sources. Three retail water providers provide water to COSMA:

- California Water Service Company,
- City of Stockton Municipal Utilities Department (COSMUD), and
- County Maintenance Districts.

Because water supply for the entire COSMA is coordinated and relies on the same sources of water, the WSE analysis evaluated demand for the entire COSMA.

To meet existing demands, COSMA relies on both surface water and groundwater. COSMA currently receives all of its surface water through the wholesale purchase of treated water from Stockton East Water District (SEWD) based on the apportionment criteria set forth in the "Second Amended Contract Among the Stockton East Water District, The California Water Service Company, The City of Stockton, The Lincoln Village Maintenance District, and The Colonial Heights Maintenance District Providing For The Sale of Treated Water." The City of Stockton also has negotiated two interim water supply contracts (described below) on the Stanislaus River that are also conveyed through SEWD. In all, COSMA's available "firm" surface water supplies total 134.17 thousand acre-feet (taf) per year in wet or above normal years and 58.17 taf per year in critical years. Without interim supplies, SEWD supplies in wet and above normal years total 104.17 taf per year. It should be noted that the COSMA is served using conjunctive use methods where groundwater and surface water are balanced so as not to exceed accepted groundwater yields over a long term period or in any given year (explained in more detail below and in the City's WSE for its General Plan Update). Each surface water source of COSMA is discussed in turn, as follows:

New Hogan Reservoir (40,171 afy): SEWD and Calaveras County Water District (CACWD) hold a repayment contract with the Bureau of Reclamation (Reclamation) for water stored in New Hogan Reservoir. Because this water is not part of the Central Valley Project, it is not subject to Central Valley Project deficiencies in dry hydrologic years, and has no expiration date. Out of this contract SEWD has a right to divert up to 40,171 afy and CACWD has a right to divert up to 30,928 afy. The 40,171 afy is 56.5 percent of the total contract amount with CACWD holding 43.5 percent.

Calaveras County Water District Transfers (10,000 afy): SEWD holds a contract with CACWD for transfer of unused water entitlements under CACWD's Reclamation contract. While water under this contract continues to be delivered at 24,000 afy, the contract amount may be reduced to around 10,000 afy as competing demands arise from new development in Calaveras County. Based on buildout projections for the Calaveras General Plan, the 10,000 afy is considered a reliable long-term water supply for SEWD.

New Melones Reservoir (40,000 afy): This Stanislaus River water source is only available in wet and above-normal years. Under a Bureau of Reclamation contract, SEWD is entitled to 40,000 afy for municipal and industrial uses. The infrastructure to supply this water is complete, but the source is not reliable because the Central Valley Project Improvement Act and other regulatory actions have reduced the quantity of water available from this source.

South San Joaquin Irrigation District (15,000 afy): The City of Stockton holds an interim water transfer contract for water treated and wheeled through SEWD with South San Joaquin Irrigation District (SSJID) for 15,000 afy from the Stanislaus River (New Melones). The contract amount is limited to a minimum of 4,000 afy in critically dry years. While this contract expires in 2009, COSMUD is pursuing a renewal of the contract. Because SSJID is a senior water rights holder, this supply is considered reliable.

Oakdale Irrigation District (OID) (15,000 afy): The City of Stockton also has an interim contract with OID for up to 15,000 afy from the Stanislaus River (New Melones) that is wheeled and treated by SEWD to the COSMA. The contract is expected to deliver at least 4,000 afy in critically dry years. Because OID is a senior water rights holder on the Stanislaus River, this is considered a reliable source of water. While the contract is due to expire in 2009 (with a possible ten year renewal), the City of Stockton is pursuing a renewal of the contract and OID has indicated in its draft Water Resources Plan that it intends to implement long-term water transfer agreements in order to fund improvements to its delivery infrastructure.

Future Water Supply

The proposed project's future water supply would rely on the City's deliveries and supply. As discussed at the outset of this section, the City has prepared a WSE, also known as a Water Supply Assessment (WSA) for the 2035 General Plan Update. The WSE is based on the most recent information regarding the amounts of reliable groundwater and reliable surface water available to the COSMA. The WSE determined that the COSMA water purveyors (COSMUD, Cal Water, and SJCMDs) cannot currently support the population growth assumed to occur as part of the proposed 2035 General Plan Update without the initial phase of the DWSP (discussed below) and the upgrade of the SEWD WTP to 60 mgd. The DWSP, which is expected to be in operation by 2010 or 2011, along with other available sources (that include water from the SEWD water treatment plant upgrade), would be a viable water supply for meeting the proposed 2035 General Plan Update's buildout water demand (City of Stockton 2006).

The DWSP will be a conjunctive use program that will integrate surface water and groundwater management components. The surface water component of the DWSP will include a screened intake facility on the San Joaquin River, new pipelines to convey Delta water to a new water treatment facility just north of the COSMA, and treated water pipelines to deliver water to the City's existing water distribution system. In addition, shared infrastructure with the California Water Service Company (Cal Water) will be used to distribute DWSP treated water throughout Cal Water's service area within the COSMA. The groundwater component will include

coordinated groundwater and surface water management. With the implementation of the DWSP, the City will pump less groundwater and the groundwater levels will be allowed to recover by in-lieu recharge. After the development of the initial phase (30 mgd) of the DWSP, the City will consider the need for an aquifer storage and recovery (ASR) program to optimize the use of Delta water in periods when supply exceeds demand. Initially, the City would study and implement a pilot program to test the feasibility of an ASR program and define the potential location of the injection/extraction wells. Ultimately by about 2050, the water treatment plant (WTP) would be expanded to treat 160 mgd of surface water up to the maximum water rights request of 125,900 afy.

On January 6, 1996, the City submitted a water rights application to the State Water Resources Control Board (SWRCB) to secure rights to divert surface water from the Delta. The City's water rights application addresses a long-term planning horizon through the year 2050, requesting an ultimate diversion to 160 mgd (125,900 afy). Initially the DWSP will divert about 30 mgd (33,600 afy) to meet demands through 2035 or build-out of the General Plan Update. The water rights application specifies a Place of Use for the water that is coincident with the City's 1990 General Plan Boundary. An EIR for the DWSP was prepared in 2005 and certified by the City on November 8, 2005. On December 20, 2005, the SWRCB issued the City a permit for Diversion and Use of Water for up to 33,600 afy. The SWRCB divided the water rights application into two separate applications, Applications 30531A and 30531B. Application 30531A covers only the initial phase of the DWSP up 30 mgd (33,600 afy) and the place of use is confined to the current 1990 General Plan boundary. When later phases of the DWSP are needed, the City will be required to return to the SWRCB to request that the permit amounts be increased. The initial phase was granted a water right under California Water Code Section 1485 (Price, pers. comm. 2008). This allows the City to take out of the Delta as much water as the City's wastewater treatment plant discharges into the Delta. This quantity (which fully covers the 33,600 afy) is not restricted; as long as the wastewater is discharged into the Delta, the same amount of water can be diverted. Section 1485 water may be subject to pumping restrictions due to fish protection, however, as described in Chapter 4 of the DWSP Draft Program EIR (April 2005). Considering all of the currently available information, the DWSP will provide a very reliable source of water.

The DWSP has been approved by the City of Stockton. It is currently proceeding through its final permitting stages, with only a U.S. Clean Water Act Section 404 (through the U.S. Army Corps of Engineers) and a California Fish and Game Code Section 2081 (take permit, Delta smelt) pending. City of Stockton staff have been actively pursuing these permits, and have expressed it is reasonable to expect that the permits will be granted in the next few months. No major impediments are foreseen. The City is going out to bid on the first phase (30 33,600 afy) of the DWSP in early 2009. The project will be funded through a combination of water user fees and bonding that will be procured by the City. A rate study is nearing completion and the City is expected to act on the funding package in early 2009. (Price, pers comm., 2008)

A number of recent events surrounding the protection of rare, threatened and endangered fish species within the Sacramento-San Joaquin Bay Delta could affect future water deliveries of Delta water generally. It is not clear at this time, however, whether and/or how the surface water component of the DWSP could be affected, but given the DWSP was granted rights under Water Code 1485, it is likely the DWSP would not be significantly affected (see discussion above). Nevertheless, a discussion of recent activities potentially affecting water supply in the Delta is included because of the potential for any uncertainty.

Numerous fish species in the Delta have been listed as threatened or endangered species, including the Central Valley winter and spring runs of Chinook salmon, Central Valley steelhead, Delta smelt, and green sturgeon. The Federal Bureau of Reclamation and the California Department of Water Resources DWR coordinate operation of the Central Valley Project (CVP) and State Water Project (SWP) through the Operating Criteria and Plan (OCAP). In 2004, the National Marine Fisheries Service issued a biological opinion concluding that the OCAP would not jeopardize the continued existence of listed salmon and steelhead species or modify their critical habitat. In 2005, the U.S. Fish and Wildlife Service issued a biological opinion reaching the same conclusions with respect to the Delta Smelt. Thereafter, in 2005, a coalition of environmental and sportfishing organization filed federal lawsuits seeking to invalidate these "no jeopardy" conclusions. (*Natural Resources Defense Council*

v. Kempthorne [U.S. Dist. Ct. N.D.Cal. Case No. 1:05-CV-01207] (Delta smelt biological case); *Pacific Coast Federation of Fishermen's Associations v. Gutierrez* [U.S. Dist. Ct. N.D.Cal. Case No. 1:06-cv-00246 (salmon biological opinion case).)

In May 2007, the Honorable Justice Wanger of the United States District Court, Eastern District, decided the biological opinion prepared for the Delta smelt violated the Federal Endangered Species Act. In December 2007, Judge Wanger issued an interim order restricting exports at certain times, among other actions, to protect the Delta smelt until a new biological opinion is prepared. In July 2008, Judge Wanger ruled that the salmon biological opinion also violated the Endangered Species Act, although Judge Wanger declined to order a reduction on water deliveries in connection with that case.

Currently, new biological opinions are being prepared for by the federal fisheries agencies. When reconsultation is complete, both the USFWS and NMFS will issue biological opinions under the ESA, which will address whether the OCAP will jeopardize the continued existence of any of the respective listed species or cause the destruction or adverse modification of any critical habitat for such species. Any reasonable and prudent measures or reasonable and prudent alternatives coming out of the consultations may lead to changes in the operation of the SWP or CVP. It is unclear how possible adverse rulings in the pending litigation might affect system operations of the SWP or CVP (and in turn, the DWSP) before completion of the new consultations.

In addition to endangered species and ecosystem restoration concerns, other factors potentially affecting the reliability of water delivered from the Sacramento-San Joaquin Delta, including State Water Project supplies, include climate change, water quality and the potential failure of the Delta levee system due to earthquakes and floods, which could cause saltwater to take a hold of the Delta. Currently, several efforts are underway to help recover endangered species and their habitat in the Delta as well as provide for sufficient and reliable water supplies, these efforts include the following:

Delta Vision: In September 2006, Governor Arnold Schwarzenegger created the Delta Vision by Executive Order in order to find a durable vision for sustainable management of the Sacrament-San Joaquin Delta. In February 2007, the Governor appointed the independent Delta Vision "Blue Ribbon" Task Force to develop a long-term sustainable Vision for the Delta. In December 2007, the Task Force issued its report, Our Vision for the California Delta, which set forth 12 integrated and linked recommendations to protect and restore the Delta and help increase reliability of Delta water supply. The Task Force is currently working on the second step of its two-year charge, to develop a strategic plan that will implement its vision for the Delta. The vision will address a variety of topics, including restoring the ecosystem health of the delta, improving water supply reliability and water quality, future land use patterns, and Delta governance. The Task Force's report is expected be released by the end of October 2008 and it is expected that legislation to implement its recommendations will be introduced in the 2009 legislative session.

The Bay Delta Conservation Plan: The purpose of the Bay Delta Conservation Plan (BDCP) is to develop a comprehensive conservation plan under the federal Endangered Species Act and the California Natural Community Conservation Planning Act that will allow the issuance of "incidental take authorizations" under federal and state law for endangered and threatened species that are covered by the plan. The BDCP is intended to provide an ecosystem-based approach that will help restore fish and wildlife species in the Delta while providing for sufficient and reliable water supplies. The basic overall conservation strategy for the BDCP is scheduled to be available by the end of 2008, with a draft of the full plan available by the middle of 2009. A draft Environmental Impact Report/Environmental Impact Statement is expected to be available for public review by the end of 2009. The BDCP Steering Committee anticipates that the BDCP will be approved, and a permit decision will be made, by the end of 2010.

CALFED Bay-Delta Program: The CALFED Bay-Delta Program is a unique collaboration among 25 state and federal agencies formed to improve California's water supply and the ecological health of the Delta. The CALFED Bay Delta Program is overseen by California Bay-Delta Authority. Planning for the Program began in

1995 and became final in 2000 with the release of the Record of Decision, final programmatic Environmental Impact Statement/Environmental Impact Report and California's Water Future: A Framework for Action. The CALFED Program works in four inter-related, over-arching categories: ecosystem restoration, levee stability, water quality improvement, and water supply reliability.

Although, as evident from the discussion above, several large-scale planning efforts are underway to improve Delta ecosystem health and water supply reliability, it is impossible to know at this time how and to what degree these efforts could potentially adversely or beneficially affect the DWSP's surface water component, if DWSP would be affected at all because of its water rights status.

The total existing and future water supply, not including the DWSP, is shown in Table 4.13-1.

Table 4.13-1
Current and Future Water Supplies (afy)

Source	Annual Contract Amount Acre-feet (AF)			Critical Year Availability			
	Guaranteed	Possible or Interim	Guaranteed + Possible or Interim	2000	2010	2020	2035
Current and Future Sources of Supply							
Reclamation – New Hogan Water Supplies, CACWD and SEWD	40,171	--	40,171	20,000	12,000	12,000	12,000
CACWD Appropriative Water Rights	10,000	14,000	24,000	20,000	10,000	10,000	10,000
Reclamation – New Melones Interim Water Contract	40,000	--	40,000	Not Available in Dry Years			
SSJID Transfer Stanislaus River	--	15,000	15,000	4,000	4,000	0	0
OID Transfer Stanislaus River	--	15,000	15,000	4,000	4,000	4,000	0
Future Appropriative Water Rights on the Calveras River	--	50,000	50,000	Not Available in Dry Years			
Total	90,171	94,000	184,171	98,000	80,000	76,000	72,000

Notes: CACWD = Calaveras County Water District; OID = Oakdale Irrigation District; Reclamation = U.S. Bureau of Reclamation; SEWD = Stockton East Water District; SSJID = South San Joaquin Irrigation District
SEWD has a right to 56.5 percent of the yield, and CACWD has rights to the remaining 43.5 percent. CACWD currently uses approximately 3,500 acft of its allocation, and use of their appropriative water rights is 13,000 ac-ft.
Based on an agreement between CACWD and SEWD, SEWD currently has use of the unused portion of CACWD's appropriative water rights that currently yields approximately 24 TAF
* Does not include Interim supplies
Source: City of Stockton 2007

Other Water Supplies Included in this Analysis

Delta Water Supply Project (125,900 afy): On March 8, 2006, the SWRCB issued an appropriative water right permit for diversions from the Delta of up to 33,600 afy (or 30 million gallons per day (mgd)) by COSMUD for use within the Place of Use identified in the Water Right Application (also known as the "DWSP Phase 1 – 30

mgd" supply). Phase 1 is expected to be operational by 2010/11 and will be funded through customer user rates, development fees, and bonds. Based on the WSE completed for the General Plan Update, the Phase 1 water, along with the other existing water supplies and their forecasted availability in 2035, will accommodate the build-out water demand of both the 1990 and 2035 General Plans. Additional supplies will be pursued later.

Conjunctive Use of Groundwater (0.75 AF/acre/year): As mentioned above, conjunctive use of groundwater and surface water is critical to addressing the year-to-year and seasonal variability in hydrology and will also help ensure long-term water supplies for the COSMA. Groundwater is available throughout the developed acreage at the rate of **0.75** AF/acre/year in any one given year and **0.60** AF/acre/year over a long-term average.

WATER SUPPLY RELIABILITY

The following discussion is based on the City's WSE. In a dry year and multiple dry years, when surface water supplies are curtailed (as described above in Table 4.13-1), groundwater extraction is increased to meet demand. For instance, in dry years, surface water curtailments are considered at both the SEWD and DWSP WTPs, so groundwater and rationing are used to make up the difference. The objective is that over a 70-year future horizon, the groundwater use does not exceed the predefined sustainable yield of the basin as described below.

Groundwater modeling in the 2006 WSE for the City's GP Update EIR showed that for all years through 2035, groundwater extraction rates would be below the 0.75 af/year threshold and well below the projected sustainable yield of the aquifer and basin. The 2006 WSE indicates that in the dry year conditions, there are adequate water supplies while meeting the average sustainable groundwater yield and not exceeding the maximum groundwater yield in any one hydrologic year type.

EXISTING AND FUTURE WATER DEMAND

Because the proposed project would be included in the City's water supply, it is relevant to describe the cumulative demand anticipated at full buildout of the City of Stockton's General Plan Update. As described in the 2006 WSE prepared for the City's General Plan Update, water demands in the COSMA were evaluated in the DWSP, which were incorporated into the City's 2005 Urban Water Management Plan (UWMP) and are incorporated by reference in this section. Methodology used to determine water demands are detailed in the WSE and are also incorporated by reference.

Land-use-based water demand factors are developed on an acre-feet per acre per year (AF/ac/year) basis. For purposes of the DWSP Feasibility Report, land use based water demand factors were determined and applied to the current 1990 General Plan. In summary, this application of land-based unit demand factors totaled approximately 85,330 afy of water demand by 2015. The COSMA is currently producing 68,000 afy. The same factors are applied to the GP Update to consider the build-out water demand of 156,083 afy in 2035. Assuming a total population of 592,000 in 2035, the demand figure equates to approximately 235 gallons of water per day per capita (Stockton 2006).

Table 4.13-2
City's Total Demands* to Full Buildout of the General Plan Update as Stated in the WSE (afy)

Year	2005	2010	2015	2020	2030	2035
Demand	68,714	81,250	85,330	106,250	137,500	156,083

* Summarizes demands presented in the City's 2006 WSE and includes Cal Water and COSMUD demands for municipal water

GLOBAL CLIMATE CHANGE AND WATER SUPPLY

In recent years, the scientific consensus has begun to accept that Earth's climate is changing and has broadened to consider increasing concentrations of greenhouse gases, attributable to anthropogenic activities, as a primary cause of global climate change. The United Nations Intergovernmental Panel on Climate Change (IPCC) predicts that changes in Earth's climate will continue through the 21st century and that the rate of change may increase significantly in the future because of human activity (IPCC 2001b, 2007). An extensive background on global climate change including modeling and trends is found in Section 5 "Cumulative Impacts."

Today, the issue of global climate change has begun to play an increasing role in scientific and policy debates over multiple issue areas. Of particular concern are the existing and potential future effects of global climate change on hydrologic systems and water management (e.g., domestic water supply, agricultural water supplies, flood control, and water quality). There is evidence that global climate change has already had an effect on California's hydrologic system; for example, historical data indicate a trend toward declining volumes of spring and summer runoff from the Sierra Nevada.

California water planners and managers have been among the first groups in the nation to seriously consider the implications of statewide and regional climate change (rather than global-scale changes) on the reliability and safety of their systems. The California Water Plan (Bulletin 160) first briefly addressed climate change in 1993 (DWR 1993). This analysis has most recently been expanded and refined in the 2005 update of the California Water Plan, which explores a wide range of climate impacts and risks, including risks to water resources (Kiparsky and Gleick 2005, Roos 2005). The 2005 update also describes efforts that should be taken to quantitatively evaluate climate change effects for the next update of the California Water Plan (DWR 2005).

Water Supply Projections

Several recent studies have shown that existing water-supply systems are sensitive to climate change (Wood and Palmer 1997). Many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows as a result of rainfall and snowpack (Kiparsky and Gleick 2005, Cayan et al. 2006). Little work has been performed on the effects of climate change on specific hydrologic basins, though groundwater recharge reduction, higher evaporation, shorter rainfall seasons could be expected (Kiparsky and Gleick 2005). Conversely, rapid or additional winter runoff, however, would be occurring at a time when some basins, particularly in Northern California, are being recharged at their maximum capacity. However, the specific extent to which various meteorological conditions will change and the impact of that change on hydrologic systems are both unknown.

DWR's 2006 report focused on climate change impacts on SWP operations and on the Delta. The results of that analysis suggest several impacts of climate change on overall SWP operations and deliveries. In three of the four climate scenarios simulated, reservoirs north of the Delta experienced shortages during droughts. Van Rheenen et al. (2004) studied the potential effects of climate change on the hydrology and water resources of the Sacramento–San Joaquin River basin using five PCM scenarios. The study concluded that most mitigation alternatives examined satisfied only 87% to 96% of environmental targets in the Sacramento system, and less than 80% in the San Joaquin system. Therefore, modifications and improvements to system infrastructure could be necessary to accommodate the volumetric and temporal shifts in flows predicted to occur with future climates in the Sacramento–San Joaquin River basin.

Lund et al. (2003) examined the effects of a range of estimates of climate warming on the long-term performance and management of California's water system. The study estimated changes in California's water availability, including effects of forecasted changes in year-2100 urban and agricultural water demands, using a modified version of the CALVIN model. Some of the main conclusions are summarized as follows:

- Methodologically, it is useful and realistic to include a wide range of hydrologic effects, changes in population and water demands, and changes in system operations in studies of climate change.

- A broad range of climate-warming scenarios show significant increase in wet-season flows and significant decreases in spring snowmelt. The magnitude of effects of climate change on water supplies is comparable to increases in water demand from population growth in the 21st century.

- In Southern California, population growth is expected to be more problematic than climate change. Population growth, conveyance limits on imports, and the high economic value of water in Southern California could lead to high levels of wastewater reuse and substantial use of desalinated seawater along the coast.

- California's water system could economically adapt to all the climate-warming scenarios examined in the study. California can adapt to population growth and global climate change by using new technologies for efficiency of water supply, treatment, and water use; implementing water transfers and conjunctive use; coordinating operation of reservoirs; and improving flow forecasting. The cooperation of the federal, state, regional, and local governments can also be helpful. Even if these strategies are implemented, however, the costs of water management are expected to be high and there is likely to be less "slack" in the system than under current operations and expectations.

Summary of Global Climate Change on Water Supply

As described by several projections, overall, climate change is expected to have a greater effect in Southern California than Northern California. For example, for year 2020 conditions, where optimization is allowed (i.e., using the CALVIN model), scarcity is essentially zero in the Sacramento Valley for both urban and agricultural users, and generally zero for urban users in the San Joaquin and Tulare basins. Rather, most water scarcity will be felt by agricultural users in Southern California, although urban users in Southern California, especially those in the Coachella Valley, will also experience some scarcity. By the year 2050, urban water scarcity will remain almost entirely absent north of the Tehachapi Mountains, although agricultural water scarcity in the Sacramento Valley could increase to about 2% (Medellin et al. 2006).

Based on the conclusions of current literature regarding California's ability to adapt to global climate change, it is reasonably expected that, over time, the state's water system will be modified to be able to handle the projected climate changes, even under dry and/or warm climate scenarios (DWR 2006). Although coping with climate change effects on California's water supply could come at a considerable cost, based on a thorough investigation of the issue, it is reasonably expected that statewide implementation of some, if not several, of the wide variety of adaptation measures available to the state will likely enable California's water system to reliably meet future water demands. For example, traditional reservoir operations may be used, in conjunction with other adaptive actions, to offset the impacts of global warming on water supply (Medellin et al. 2006; see also Tanaka et al. 2006 and Lund et al. 2003). Other adaptive measures include better water-use efficiency practices by urban and agricultural users, conjunctive use of surface water and groundwater, desalination, and water markets and portfolios (Medellin et al. 2006; see also Lund et al. 2003 and Tanaka et al. 2006). More costly statewide adaptation measures could include construction of new reservoirs and enhancements to the state's levee system (CEC 2003). As described by Medellin et al. 2006, with adaptation to the climate, water deliveries to urban centers are expected to decrease by only 1%, with Southern California shouldering the brunt of this decrease.

4.13.3 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations or laws are applicable to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

SB 610 applies to cities or counties making decisions about development and does not apply to State or Federal agencies. Although the proposed project is not subject to State Senate Bill 610 or local General Plan Policies, these policies are still discussed below for context.

Senate Bill 610

California Senate Bill 610 (SB 610; Chapter 643, Statutes of 2001), which took effect on January 1, 2002, was created so that cities and counties could make appropriate land use decisions based on water supply and availability. SB 610 mandates that detailed water availability information, in the form of a water supply assessment as defined in the bill, be provided to city and county decision makers prior to approval of large development projects. A project subject to the requirements of SB 610, as defined by California Water Code Section 10912, would be any or all of the following:

1. Residential development of 500 or more units;

2. Shopping center or business establishment employing 1000 or more people or encompassing 500 or more square feet;

3. Office building employing 1000 or more people or encompassing 500 or more square feet;

4. Hotel or motel with 500 or more rooms;

5. Industrial or manufacturing plant or industrial park employing 1000 or more people or encompassing 650 or more square feet or on 40 or more acres;

6. A mixed use project or other project with water demand equal to a 500 dwelling development;

7. For a supplier with 5000 or fewer connections, if the project will increase connections or demand by more than 10%.

A water supply assessment should include, in as much detail as possible, existing and future water supplies and demands over a 20 year timeline, water agreements or contracts, water demands of the proposed project, and an assessment to determine if the available supplies will be able to support the proposed project demands during normal, single dry, and multiple dry water years (California Department of Water Resources 2003a).

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Cityof Stockton 2035 General Plan

The following goal and policies in the 2035 City General Plan relating to water supply are applicable to the proposed project.

Public Facilities

- **Goal PFS-1:** To ensure the provision of adequate facilities and services that maintain service levels are adequately funded and allocated strategically.

  - **Policy PFS-1.4: Development Impacts to Existing Infrastructure.** The City shall ensure that proposed developments do not create substantial adverse impacts on existing infrastructure and that the necessary infrastructure will be in place to support the development.

  - **Policy PFS-1.5: Funding for Public Facilities.** The City shall continue to utilize developer fees, the City's public facilities fees, and other methods (i.e., grant funding and assessment districts) to finance public facility design, construction, operation, and maintenance.

  - **Policy PFS-1.8: Impact Mitigation.** The City shall review development proposals for their impacts on infrastructure (i.e., sewer, water, fire stations, libraries, streets) and require appropriate mitigation measures if development reduces service levels.

  - **Policy PFS-2.1: Water Conservation.** The City shall continue to implement water conservation programs that save significant amounts of water at a reasonable cost.

  - **Policy PFS-2.2: Water Supply.** The City shall evaluate long-term water supply strategies, including acquiring or developing additional water supplies that would be available during drought periods, to offset the shortages anticipated from existing supplies, and improved water conservation and reuse. For new development, the City will require the use of nonpotable water for irrigation of large landscaped areas where feasible and cost effective.

  - **Policy PFS-2.3: Water Treatment Capacity.** The City shall plan, secure funding for, and procure sufficient water treatment capacity and infrastructure to meet projected water demands.

  - **Policy PFS-2.4: Growth Trends.** The City shall establish a process for monitoring water demand growth trends to anticipate water supply needs.

  - **Policy PFS-2.5: Water Quality.** The City shall monitor water quality regularly to ensure that safe drinking water standards are met and maintained in accordance with State and EPA regulations and take necessary measures to prevent contamination.

  - **Policy PFS-2.6: Level of Service.** The City shall maintain adequate levels of water service by preserving, improving, and replacing infrastructure as necessary.

  - **Policy PFS-2.7: Water Supply for New Development.** The City shall ensure that water supply capacity and infrastructure are in place prior to granting building permits for new development.

  - **Policy PFS-2.8: Delta Water Supply.** The City shall not approve new development that relies on water from the Delta Water Supply Project until this Delta water is allocated through a water right to the City by the State of Water Resources Control Board or a replacement water supply is secured.

  - **Policy PFS-2.9: Water Facility Sizing.** The City shall ensure through the development review process that public facilities and infrastructure are designed to meet ultimate capacity needs, pursuant to a master plan, to avoid the need for future replacement to achieve upsizing. For facilities subject to incremental sizing, the initial design shall include adequate land area and any other elements not easily expanded in the future.

  - **Policy PFS-2.10: Sustainability of Surface Water Supplies.** The City shall work in concert with other water purveyors in the region to seek long-term renewable surface water contracts, and shall take actions to acquire, protect, and expand surface water rights to serve growing water demands.

- **Policy PFS-2.11: Sustainability of Groundwater Supplies.** The City shall work in concert with other water purveyors in the region to achieve the target yield (0.6 afy) of the drinking water aquifer, and shall limit its long-term average groundwater withdrawals to this target yield.
- **Policy PFS-2.12: Water for Irrigation.** The City shall encourage the use of non-potable water supplies for irrigation of landscape.

4.13.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Criteria for determining the significance of impacts related to water supply were based on State *CEQA Guidelines* Appendix G and guidance from the City. The proposed project would result in a significant impact on water supply if it would result in:

- Lack of sufficient water supplies available to serve the project from existing entitlements or resources.

METHODOLOGY

Impact analysis was based on review of the Water Supply Evaluation for City of Stockton's 2035 General Plan Update, relevant information on existing and proposed conditions provided by the CDCR and the Federal Receiver, and coordination with COSMUD.

IMPACT WS-1 Lack of Sufficient Water Supplies to Serve the Project from Existing Entitlements or Resources. *Although the proposed project would increase demand for potable water, the City has short-term water supply capacity to serve the project, and will have long-term water supply capacity to serve the project upon completion of the DWSP (currently estimated 2010 – 2011), the same timeframe as completion of the project. Even if the DWSP is not completed by 2011, the City has sufficient supplies to serve existing customers, the project, and anticipated growth through the year 2020 and beyond. Therefore, the project would result in a less-than-significant impact.(Less than significant)*

The California Health Care Facility Stockton project includes a sub-acute medical care facility on the project site with up to 1,734 beds. The facility would also consist of housing clusters, diagnostic and treatment centers, an armory, warehousing and support facilities, a central plant, outdoor recreation fields, a gatehouse, a regional production kitchen, staff training facilities and parking areas.

Although the proposed project is consistent with the City of Stockton 2035 General Plan land use designation for the site and therefore is likely included within the development assumptions for the WSE, due to the intensity of the project, some of the demand for this project may not have accounted for in the City's General Plan and the 2005 Urban Water Management Plan (2005 UWMP). The project is part of the existing NCYCC facilities in Stockton. For the purposes of this analysis, however, it is assumed that all of the demand must be analyzed separately and additively from current institutional facilities water demand estimates in the 2005 UWMP. As of June 2008, the three existing operational youth correctional facilities combined housed approximately 450 wards and the CTCA was used as a training facility (a 500-bed prison known as a "re-entry" facility is planned by CDCR for this location). The most recent water usage data at the existing NCYCC facility was collected in 2006 (CPR 2008:21–22). Yearly consumption was 187 million gallons (MG) (574 AF), with a 0.51 million gallons per day (MGD) demand. The maximum monthly demand was 37 MG, or 1.23 MGD in a 30-day month. The maximum day demand was estimated at 1.20 MGD in a report produced by Carollo Engineers in December 2006. The City of Stockton planning and design criteria require a fire flow of 4,500 gallons per minute (GPM) for four hours. The total of the more conservative maximum daily demand is 1.23 MGD / 855 gpm, and the fireflow demand is 7.71 MGD / 5,355 GPM. Based on the total NCYCC population in 2006 of 2,246, the average water consumption per person is 152 gallons per day/bed (GPD). This figure includes irrigation use, and is consistent with long-term average use at the site.

The proposed project would contain 1,743 beds. The Handbook of Environmental Engineering (2000) was referenced to develop a standard "per bed" water demand factor for the proposed project. The design guide specifies typical water use rates of 250 GPD per bed space for hospitals and 125 GPD per bed space for institutional uses. The proposed medical and mental health care facility is expected to generate a demand somewhere between a full-service hospital and an institutional use. The following analysis assumes 150 GPD per bed for potable water plus 77 GPD per bed for additional demands for the central plant and irrigation (a total of 227 gpd per bed). Using the average day demand factor of 227 GPD per bed, the proposed project would require 0.40 MGD of potable water, including irrigation demands, assuming average water consumption per person in 2006 does not increase. This is equivalent to a demand of approximately 444 afy.

TOTAL FUTURE DEMAND

The total future demand is summarized in Table 4.13-3.

Table 4.13-3
City's Total Existing and Future Demands (afy)

Year	2004	2010	2015	2020	2030	2035
City GP 2035 Demand	68,714	81,250	85,330	106,250	137,500	156,083
Project Demand (Increase)	0	444*	444	444	444	444
Total Demand	**68,714**	**81,694**	**85,774**	**106,694**	**137,944**	**156,527**

Source: City of Stockton 2006
*Although project is not anticipated to be completed until 2011, the project demand is added to the 2010 scenario.

Water Sufficiency Analysis

A comparison of existing and future supply and demand is presented in Table 4.13-4. The table assumes that all existing guaranteed water would be available, plus the DWSP project, which, as described above, is a reasonably likely project. This is a conservative analysis that does not assume renewal of existing agreements for water that is not firm. For the area within the COSMA service area, the total supply exceeds total demand for all years, as COSMUD assures that adequate water quality and supplies will be available during all years (Luebberke pers. comm. 2008, Granberg pers. comm., 2008).

As described in Table 4.13-4, the COSMA has sufficient supplies to meet water demands associated with the City's buildout of its 1990 General Plan and 2035 General Plan Update areas in addition to the additive demand associated with the project. Further, as described above, the project's actual total additive demand is likely less than the demand assumed for this analysis (i.e., 444 afy) thereby creating an even greater surplus within the COSMA waster system over the long-term.

Table 4.13-4
Supply and Demand Comparison

	2005	2010	2015	2020	2025	2035
Total Existing Firm Surface Water Supply (afy)*	90,171	90,171	90,171	90,171	90,171	90,171
DWSP Supply*** (afy)	0	33,580	33,580	33,580	33,580	33,580
Approximate Groundwater Supply** (afy)	50,000	50,000	50,000	50,000	50,000	50,000
Total Supply	140, 171	173,751	173,751	173,751	173,751	173,751
Total Demand (afy)	**68,714**	**81,694**	**85,774**	**106,694**	**137,944**	**156,527**
Surplus	**71,457**	**92,057**	**87,977**	**67,057**	**35,807**	**17,224**

*Subject to some reductions in dry years
** Could be reduced by the City voluntarily in accordance with the conjunctive use program.
***Considered firm source of water supply

Short- term supplies may be supplied by the City until it reaches the capacity of its supplies, without the DWSP, as it is not currently at full capacity and the General Plan has been not been built out (City of Stockton, 2006). Long-term supplies have been assured by the COSMUD although not all the supplies and DWSP infrastructure for delivery of water for the General Plan Update buildout have been built. Prior to DWSP operation in 2010/2011, supplies are reasonably assured by existing contracts. Therefore, the permanent long-term water supply can be delivered to the proposed project prior to construction of the DWSP facilities (currently estimated at 2010 or 2011). Without the DWSP and associated conjunctive groundwater supply, projected demand (existing plus project) would exceed supply sometime around 2025. This conclusion was confirmed with City of Stockton staff (Granberg, pers. comm.. 2008)

The proposed project is not expected to be operational until 2011; therefore the DWSP will likely be on-line when the increased project demand is introduced. If completion of the DWSP is delayed such that the proposed project is operational prior to the DWSP, as indicated in Table 4.13-4 above, the anticipated surplus in year 2010 (92,957 afy) and 2020 (67,057 afy) exceed the supply generated by the DWSP (33,580 afy). Therefore, the proposed project would not increase demand beyond available supply prior to any reasonable expectation of operation of the DWSP. During drought conditions, when water supplies to the City are restricted, the project would implement conservation measures (shortened shower times, reduced landscape irrigation, etc.) just like other water customers in the region. Further, the project is being designed to attain LEED standards, and one major component of LEED is to incorporate a high degree of water conservation features. Consequently, the estimated water use from the project is likely overstated because it is based on conventional design.

As described above in the “Environmental Setting,” the DWSP will construct a diversion facility, water treatment plant, and water transmission facilities. The completed facilities will initially provide 30 mgd of Delta water supply and could be expanded to an ultimate capacity of 160 mgd. Tthese facilities would need to be constructed to serve the COSMUD over the long-term, as well as other proposed development in the region. The environmental impacts of the DWSP, as identified in the DWSP EIR (City of Stockton 2006) will occur without development of the proposed project because the DWSP is required to serve the regional development and is needed whether or not the proposed project is implemented. However, because the project would also be served, to an extent, by the DWSP, the impacts of the DWSP are listed here.

The DWSP EIR’s, SCH# 2003112060, analysis of project and cumulative impacts are hereby incorporated into this EIR as though set forth herein in full. (CCR §15150) The incorporated portions of the DWSP EIR, including all appendices are available for review at the City of Stockton Community Development Department, Planning Division, located at 345 N. El Dorado Street, Stockton, CA. As described in the DWSP EIR, construction of the water facilities would result in several environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation.

Impacts that would remain significant after implementation of mitigation include:

- Permanent conversion of 56.02 acres of Important Farmland to non-agricultural use, which would occur with the construction of the DWSP WTP and raw water pipeline appurtenant facilities;
- Long-term degradation of Delta scenic and visual resources in the immediate vicinity of the DWSP intake facility;
- Introduction of new sources of light and/or glare at the DWSP intake facility and WTP; and
- Short-term air quality impacts associated with construction of new facilities. (City of Stockton 2007)

As described above, it is anticipated that City water supplies are available to meet the proposed project’s water demand in the short-term prior to the construction and operation of DWSP facilities (currently estimated at 2010 or 2011). Because the DWSP EIR has been certified and the DWSP project has been approved, it is scheduled for construction, and has firm water rights, the DWSP is considered by the City to be a reasonably likely source of

future long-term water supply. The proposed project can be served with the existing water rights and entitlements available to the city, including groundwater, though it may be served in the long-term by these supplies in conjunction with the DWSP. No additional entitlements or resources are required for the proposed project. Therefore this impact is considered less than significant.

Mitigation Measure(s) for Impact WS-1:

No significant impacts would occur so no mitigation measures are required.