

## 4.12 UTILITIES/SERVICE SYSTEMS

This section evaluates the effects of implementation of the proposed project on utilities/service systems by establishing existing and planned availability and identifying anticipated demand due to the proposed project. For purposes of this environmental impact report (EIR), utilities/service systems include water supply, wastewater conveyance and treatment, and solid waste collection and disposal. Stormwater and stormwater drainage facilities are also discussed in Section 4.7 (Hydrology/Water Quality) of this EIR.

Data used to prepare this section were taken from the City's 2005 *Urban Water Management Plan* (UWMP); 2008 *Water Supply Assessment Report* (WSA), and letters, e-mails, and telephone correspondence with the City's utility and service providers; provided as Appendices M and N. Full bibliographic entries for all referenced materials and communication are provided in Section 4.12.14 (References).

No comment letters related to utilities/service systems were received in response to the notice of preparation (NOP) circulated on August 3, 2007, for the proposed project.

### Water Supply

#### 4.12.1 Environmental Setting

##### ■ Water Supply Sources

The San Bernardino Municipal Water Department (SBMWD) provides domestic water for the City and unincorporated areas of San Bernardino County, as well as providing back-up water to the City of Loma Linda. The SBMWD has a service area of approximately 45 square miles. As of 2005, the SBMWD was providing water to a population of 173,359 residents. Table 4.12-1 (Population Projections for SBMWD Service Area), below, shows the projected populations for the SBMWD service area.

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Population	173,359	180,315	181,917	183,495	185,004	186,454

SOURCE: SBMWD 2008

Groundwater from the Bunker Hill Basin is the primary source of water supply for the SBMWD. It has the capacity to provide 73,504 acre-feet per year (AFY) from groundwater and recycled water sources. Bunker Hill Basin is the primary source of water supply for the SBMWD. The basin is replenished naturally by local precipitation and by stream flow from rain and snow melt from the San Bernardino Mountains (SBMWD 2008).

The SBMWD distributes more than 16.66 billion gallons of water to over 170,000 residents. The Department produces over 497 gallons per capita per day with average consumption use reaching 330 gallons per capita per day. SBMWD produces its water supply from 57 groundwater wells located

throughout its service area. The wells range from 50 to 1,300 feet in depth and have production capacities ranging from 50 to 3,500 gallons per minute (gpm).

SBMWD’s water distribution system consists of pipelines, storage reservoirs, pumping stations, hydroelectric generating stations, manual and automatic control valves, fire hydrants, and water meters located throughout 19 individual pressure zones. SBMWD has 548 miles of pipeline varying in size from 2 inches to 78 inches in diameter, 41,317 metered water services, 13,800 valves, and 4,000 fire hydrants. SBMWD also has 31 water storage reservoirs containing a total of 112 million gallons of domestic water storage capacity. These reservoirs vary in size from 40,000 gallons to 12 million gallons and are located throughout many of the 19 pressure zones.

Pressure zone reservoir elevations range from 1,249 feet to 2,100 feet mean sea level and are located at appropriate elevations necessary to provide adequate water pressure, 40 pounds per square inch (psi) to 80 psi throughout the pressure zone service area. SBMWD’s pumping stations capacities range from 1,500 gpm to 12,000 gpm. In addition, most pressure zones have automated inter-zonal water transfer capabilities. Water production and treatment facilities are operated by state certified water production and treatment operators through an automated supervisory control data acquisition (SCADA) system. The Department’s groundwater production wells have a combined maximum production capacity of 90 million gallons per day (mgd) exceeding SBMWD’s highest recorded peak water demand of 70 mgd.

Table 4.12-2 (SBMWD Customer Accounts) summarizes the current and projected number of accounts by customer type between 2005 and 2025 in five-year intervals.

<b>Table 4.12-2 SBMWD Customer Accounts</b>					
<b>Customer Class</b>	<b>Year</b>				
	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Residential	33,399	34,394	35,029	35,664	36,299
Commercial/Industrial	5,096	5,619	6,143	6,624	7,104
Public	195	322	450	577	704
Other	19	93	167	241	315
<b>Total</b>	<b>38,709</b>	<b>40,428</b>	<b>41,789</b>	<b>43,106</b>	<b>44,422</b>

SOURCE: SBMWD 2008

Results of the water demand forecast for normal weather conditions and 2000–2025 demands are summarized by customer account in Table 4.12-3 (Average Annual Consumptive Water Demand [Acre-Feet/Year]), below. Total annual average water demands are projected to increase from the current 43,970 AFY (based on 2005 records) to 68,359 AFY in 2025, a 24,389 AFY increase. The largest growth in water demand is expected to occur in the commercial/industrial class from 9,593 AFY in 2005 to 20,724 in 2025.

**Table 4.12-3 Average Annual Consumptive Water Demand (Acre-Feet/Year)**

Customer Class	Year				
	2005	2010	2015	2020	2025
Residential	30,976	33,968	36,586	39,206	41,823
Commercial/Industrial	9,593	12,973	16,354	18,538	20,724
Public	3,332	3,934	4,537	5,139	5,742
Other	69	69	69	69	69
<b>Total</b>	<b>43,970</b>	<b>50,945</b>	<b>57,547</b>	<b>62,952</b>	<b>68,359</b>

SOURCE: SBMWD 2008

\* Based on normal weather conditions.

Total water use is the summation of the consumptive water demands presented in Table 4.12-3 and the additional water uses from water sales and unaccounted uses. Table 4.12-4 (Total Water Use [Acre-Feet/Year]) summarizes the total future water uses under normal weather conditions.

**Table 4.12-4 Total Water Use (Acre-Feet/Year)**

Water use	Year				
	2005	2010	2015	2020	2025
Consumptive Demand	43,970	50,945	57,547	62,952	68,359
Sales to Other Agencies	221	0	0	0	0
Unaccounted Water	3,310	3,835	4,332	4,738	5,145
<b>Total</b>	<b>47,501</b>	<b>54,780</b>	<b>61,879</b>	<b>67,690</b>	<b>73,504</b>

SOURCE: SBMWD 2005

\* Based on normal weather conditions.

Table 4.12-5 (Planned Water Supply [Acre-Feet/Year]) summarizes the planned water supplies for SBMWD through 2025, under normal weather conditions. The planned supply includes existing projects as well as the planned recycled water projects within the service area. SBMWD will continue to rely on the Bunker Hill Basin to fulfill the majority of its future supply needs. The planned groundwater supply is reliable until 2022 for an average year, single dry-year, and multiple dry years.

**Table 4.12-5 Planned Water Supply (Acre-Feet/Year)**

Water Supply Sources	Year			
	2010	2015	2020	2025
Groundwater	53,940	61,039	66,850	72,664
Recycled Water	840	840	840	840
<b>Total</b>	<b>54,780</b>	<b>61,879</b>	<b>67,690</b>	<b>73,504</b>

SOURCE: SBMWD 2008

## 4.12.2 Regulatory Framework

### ■ Federal

There are no federal policies that would apply to water supply for the proposed project.

### ■ State

#### ***Urban Water Management Planning Act***

The Urban Water Management Planning Act was developed due to concerns over potential water supply shortages throughout California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required, as part of the Act, to develop and implement UWMPs to describe their efforts to promote efficient use and management of water resources.

#### ***Water Conservation Projects Act***

Enacted in 1985, the state's requirements for water conservation are codified in the Water Conservation Projects Act, as reflected below:

11952. (a) It is the intent of the Legislature in enacting this chapter to encourage local agencies and private enterprise to implement potential water conservation and reclamation projects ...

#### ***Senate Bill 610***

Senate Bill 610 amended state law, effective January 1, 2002, to improve the linkage between certain land use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding supply availability and reliability with respect to certain developments to be included in the administrative record to serve as evidentiary basis for an approval action by the city or county on such projects.

Under Senate Bill 610, water supply assessment must be furnished to local government for inclusion in any environmental documentation for certain types of projects, as defined in Water Code Section 10912[a] and subject to the California Environmental Quality Act (CEQA). A fundamental source document for compliance with SB 610 is the Urban Management Plan (UWMP). If the UWMP is properly prepared, it can be used by the water supplier to meet the standard set for in SB 610.

### ■ Regional

There are no regional policies that would apply to water supply for the proposed project.

## ■ Local

### City of San Bernardino—General Plan

- Goal 9.3** Provide water supply, transmission, distribution, storage, and treatment facilities to meet present and future water demands in a timely and cost effective manner.
- Policy 9.3.1** Provide for the construction of upgraded and expanded water supply, transmission, distribution, storage, and treatment facilities to support existing and new development.
- Policy 9.3.2** Maintain and replace existing water supply, transmission, distribution, storage systems, and treatment facilities as necessary.
- Policy 9.3.3** Require adequate water supply, transmission, distribution, storage, and treatment facilities to be operational prior to the issuance of certificates of occupancy.

### Consistency Analysis

The proposed project would comply with all state and local regulations related to water resources. A Water Supply Assessment has been approved for the proposed project and is included in this document as Appendix N. As a distribution and warehouse facility, the proposed project is not anticipated to require a large amount of water. Therefore, the proposed development would not conflict with the regulations and policies set forth by the City.

## 4.12.3 Project Impacts and Mitigation Measures

### ■ Analytic Method

To determine the projected impacts of the proposed project, generation factors and projected demand guidelines were applied.

For water, a rate of 2,039.86 gallons per acre per day was applied to the proposed project. Table 4.12-6 (Projected Water Demand) identifies the project's projected water demand.

<i>Type of Land Use</i>	<i>Acreage</i>	<i>Water Use Rate</i>	<i>Projected Water Demand</i>
Industrial (Warehouse)	38.4	2039.86 gallons/acre/day (2.283 acre-feet/year)	78,331 gallons/acre/day (87.7 acre-feet/year)

SOURCE: SBMWD 2008

## ■ Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2011 CEQA Guidelines and City-specific thresholds, where applicable. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would:

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Result in insufficient water supplies available to serve the project from existing entitlements and resources

## ■ Less-Than-Significant Impacts

Threshold	Would the project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
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**Impact 4.12-1**      **Implementation of the proposed project would not require or result in the construction of new or expanded water conveyance infrastructure or treatment facilities, the construction of which could cause significant environmental effects. This impact would be *less than significant*.**

Although the project site is currently vacant, water conveyance infrastructure does exist in the vicinity of the site that serves surrounding land uses, which include commercial and industrial uses. The proposed project would connect to the existing infrastructure. However, these connections would not require substantial demolition; only the removal of existing asphalt surfaces, some of which may have already occurred as the result of road improvements. As required by law, all water utility connections would be constructed in accordance with all applicable Uniform Codes, City Ordinances, Public Works standards, and Water Division criteria. Further, the project applicant would be expected to pay all applicable City water connection fees.

As for the construction of new or expanded water treatment facilities, the City has sufficient treatment capacity in the future to serve the project site in the future without impacting existing or future users. Therefore, the project would result in a *less-than-significant* impact with respect to the construction of new or expanded waste water facilities.

Threshold	Would the project result in insufficient water supplies available to serve the project from existing entitlements and resources?
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**Impact 4.12-2**      **Implementation of the proposed project would generate an additional demand for water; however, the additional demand would be adequately served by anticipated water entitlements and resources. This impact would be *less than significant*.**

Implementation of the proposed project would increase water demand at the project site from a negligible rate to approximately 87.7 AFY. As shown in Table 4.12-3, the SBMWD projects water use within its service area to reach 12,973 AFY for industrial use, or a total of 50,945 AFY for all uses in 2010 (SBMWD 2008). Thus, the proposed increase in water use at the project site would be approximately 0.17 percent of the total projected water use in SBMWD service area in 2010.

Although implementation of the proposed project would substantially increase water usage at the project site, the increase in water use at the project site would not significantly contribute to the overall projected increase in water use in SBMWD's service area.

The proposed project would be served by the Bunker Hill Basin, which provides water for the City's entire service area. As stated previously, the SBMWD has the ability to generate 90 million gallons of water per day. As the proposed project is estimated to require 78,331 gallons per day, the project would only require 0.087 percent of the existing daily water supply. As the SBMWD continues to explore new water conservation efforts, which may include the use of recycled water, the project's water supply impacts will be even further reduced.

Based on the Water Supply Assessment (Appendix N) and existing data indicate that sufficient water entitlements and resources exist to adequately serve the proposed project and existing and future users as projected under the General Plan. Impacts to water supply would be less than significant, as the proposed project would not result in greater water supply demands than the projected total water demand for the project site included in the City's 2005 Urban Water Management Plan.

## **Solid Waste**

### **4.12.4 Environmental Setting**

Solid waste collection and disposal in the City is provided through the San Bernardino Integrated Waste Management Division (SBIWMD), which is the only permitted service provider in the City for both residential and commercial green waste, recyclables, and refuse collection. The City contracts with three landfill facilities and one recycle facility owned by the County of San Bernardino. The landfills include the Colton Landfill, San Timoteo Landfill, and the Mid-Valley Landfill.

The Colton Landfill, located at 850 Tropica Rancho Road in Colton, currently operates at a disposal rate of 470 tons per day and is expected to have capacity through 2017. The San Timoteo Landfill, located at 31 Refuse Road in Redlands, currently operates at a disposal rate of 412 tons per day and is expected to have capacity through 2016. The Mid-Valley Landfill, located at 2390 Alder Avenue in Rialto, operates at a current disposal rate of 1,765 tons per day and is expected to have capacity through 2033. The permitted daily capacity of the three landfills is 11,600 tons per day. The City also contracts with the Inland Regional Material Recycling Facility and Transfer Station, located at 2059 E. Steel Road in Colton, and Inland Empire Environmental, Inc., located at 1150 S Tippecanoe Avenue in San Bernardino. The Regional Material Recycling Facility has a current disposal rate of 600 tons per day while Inland Empire Environmental has a current disposal rate of 400 tons per day. The recycling facilities have a combined permitted capacity of 2,850 tons per day. As indicated in Table 4.12-7 (San Bernardino Landfill

Capacities), the landfills that would serve the project are expected to remain operational through 2017, 2016, and 2033. The County of San Bernardino does not have plans to open any new facilities at this time.

**Table 4.12-7 San Bernardino Landfill Capacities**

<i>Landfill</i>	<i>Daily Capacity (tons)</i>	<i>Average Daily Disposal for year 2010 (tons)</i>	<i>Total Remaining Capacity (million cubic yards)</i>	<i>Year Projected to Reach Capacity (without proposed project)</i>
Colton	3,100	470	2.7*	2017
San Timoteo	1,000	412	11.4**	2016
Mid Valley	7,500	1,765	67.5***	2033
<b>Total</b>	<b>11,600</b>	<b>2,647</b>	<b>81.6</b>	<b>--</b>

SOURCE: Washington 2010

\* As of July 1, 2009. \*\* As of December 20, 2007. \*\*\* As of September 1, 2009.

Like all California cities, San Bernardino is required by the State to divert solid waste from landfills through source reduction, recycling and composting methods. The Integrated Waste Act of 1989 and subsequent legislation (AB 939) requires a waste diversion under current regulation, to include, in order of priority, (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. The City met the 1995 reduction goal of 25 percent by weight and the 2000 goal of 50 percent waste reduction. The City currently has a waste diversion rate of 54 percent (Washington 2010).

To meet the requirements of the California Integrated Waste Management Act, the City Municipal Code Section 8.24 and General Plan Goal 9.5 establish requirements for recycling by specified development activities and the establishing of environmental projects to improve residential and commercial recycling. One such project is the Waste Reduction and Pollution Prevention program. The City of San Bernardino provides collection services at reduced rates for commingled paper wastes, containers, and other packaging materials, as well as separated loads of scrap metal, drywall, wood waste, and greenwaste.

The City’s Refuse and Recycling Division provides indoor recycling containers to businesses, organizations, schools, college campuses, and City government facilities that are receiving City recycling services in an effort to improve the City’s recycling rate. These containers are available at no additional charge for the collection of clean and dry recyclable materials to be collected by the City.

### 4.12.5 Regulatory Framework

#### ■ Federal

With the exception of determining where disposal sites are located and operational standards, there are no regional policies that would apply to solid waste for the proposed project.

## ■ State

### ***Integrated Waste Management Act***

Enacted in 1989, the Integrated Waste Management Act established an integrated waste management hierarchy that consists of the following in order of importance: source reduction, recycling, composting, and land disposal or solid waste. The law also required that each county prepare a new Integrated Waste Management Plan. The Act further required each city to prepare a Source Reduction and Recycling Element by July 1, 1991. Each source reduction element includes a plan for achieving a solid waste goal of 25 percent by January 1, 1995, and 50 percent by January 1, 2000. SB 2202 made a number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local government shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

## ■ Regional

There are no regional policies that would apply to solid waste for the proposed project.

## ■ Local

### ***City of San Bernardino General Plan***

- |                     |   |
|---------------------|---|
| <b>Goal 9.5</b>     | Provide an adequate and orderly system for the collection and disposal of solid waste to meet the demands of new and existing developments in the City.   |
| <b>Policy 9.5.3</b> | Continue to reduce the amount of solid waste that must be disposed of in area landfills, to conserve energy resources, and be consistent with the County Solid Waste Management Plan and state law.           |
| <b>Policy 9.5.4</b> | Continue to support implementation of regional recycling programs through participation in the County Solid Waste Advisory Committee, the County Solid Waste Management Plan, and appropriate state programs. |

### **Consistency Analysis**

The proposed project would comply with all federal, state, and local regulations related to solid waste disposal and recycling. As a distribution and warehouse facility, the proposed project is not anticipated to produce a large amount of waste. Solid waste will be recycled as required by City ordinance to reduce the project's overall impact to solid waste resources. Therefore, the proposed development would not conflict with the regulations and policies set forth by the City.

## 4.12.6 Project Impacts and Mitigation Measures

### ■ Analytic Method

To determine the projected solid waste generation from operation of the proposed project, the industrial solid waste generation factor of 1.9 tons per employee per year (California Integrated Waste Management Board 2008) is applied. Tables 4.12-8 (Projected Solid Waste Generation [Operation]) illustrate the resulting calculations.

<b>Table 4.12-8 Projected Solid Waste Generation (Operation)</b>			
<i>Type of Land Use</i>	<i>Employees*</i>	<i>Solid Waste Generation Rate</i>	<i>Projected Solid Waste*</i>
Warehouse	500	1.9 tons/employee/year	950 tons/year (equivalent to 22,040 cubic yards)***

SOURCE: CIWMB 2008

\* For the purposes of this section, this EIR is assuming the project will employ 500 workers

\*\*One ton is equivalent to approximately 2,204 lbs.

\*\*\*Trucking and Warehousing uses generate 95 pounds per cubic yard.

During construction, approximately 200,000 cubic yards of soil would be exported during the grading period, an average of 1,250 cubic yards per day. The exported soil would be delivered to the SANBAG grade separation site immediately adjacent to the project site on Palm Avenue. A maximum of 4,000 cubic yards would be exported on any one day during periods of intensive grading. The remainder of excavated soil would be balanced on site.

To determine solid waste impacts with implementation of the proposed project, estimated future solid waste generation is compared to the total anticipated remaining capacity at landfills that serve the City.

### ■ Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2011 CEQA Guidelines and City-specific thresholds, where applicable. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would:

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Fail to comply with federal, state, and local statutes and regulations related to solid waste

## ■ Less-Than-Significant Impacts

Threshold	Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?
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**Impact 4.12-3**      **Implementation of the proposed project would not generate solid waste that exceeds the permitted capacity of the Colton Landfill, San Timoteo Landfill, or the Mid-Valley Landfill. This impact would be *less than significant*.**

The proposed project would result in the development of a 678,275 sf warehouse/distribution facility. To determine the amount of solid waste generated by the proposed project, solid waste generation factors identified by the California Integrated Waste Management Board (CIWMB) were applied to the number of employees for the proposed project, and are shown in Table 4.12-8.

As discussed above, the proposed project would be served by Colton, San Timoteo, and Mid-Valley landfills and the Inland Regional Material Recycling Facility and Transfer Station and Inland Empire Environmental, Inc. As indicated in Table 4.12-7, the permitted disposal rate for these landfills is 11,600 tons per day, while the disposal rate for the recycling facilities is 2,850 tons per day. Operation of the proposed project would result in a new source of ongoing waste generation that would increase the solid waste sent to the landfills. As shown in Table 4.12-8, the proposed project would generate approximately 22,040 cubic yards per year (60.38 cubic yards/day) of additional solid waste that would be sent to the recycling center and one of the three landfills serving the project site. The proposed project would, therefore, constitute only 0.0224 percent of the permitted daily amount at the Colton, San Timoteo, and Mid-Valley landfills.

Furthermore, the City is responsible for continuing to meet the requirements of AB 939, which requires a 50 percent reduction in landfill disposal and preparation of a solid waste reduction plan to help reduce the amount of solid waste disposed at the landfills. The City of San Bernardino presently diverts 54 percent of the solid waste generated within the City to recycling facilities, which exceeds AB 939 requirements (Washington 2010). Assuming a 54 percent diversion rate, the project's recycled solid waste would comprise 0.14 percent of the daily amount accepted at the Inland Regional Material Recycling Facility and Transfer Station and Inland Empire Environmental, Inc.

During construction, approximately 200,000 cubic yards of soil would be exported. This soil is anticipated to be clean fill that could be sold and utilized on other construction sites in the City and would not be disposed of in the landfill. There are three private facilities in the County that accept clean dirt, including:

- Philadelphia Recycling Mine, Mira Loma
- Z-Best Grinding, Thousand Palms
- Agua Mansa Landfill, Rialto

The following analysis assumes that the entire 200,000 cubic yards would be disposed of in one of the privately owned facilities identified above or sold to a private developer in the area and would not be

disposed of in the servicing landfills.<sup>41</sup> There are no limits to the maximum amount of soil that could be disposed of at these facilities. No disposal of soil would occur in the three landfills that service the project area. The increase of solid waste generation at the project site during operation would represent a fraction (0.0224 percent) of the existing permitted capacities of the landfills serving the project site. All three landfills would be able to accommodate the solid waste that would be generated by operation of the proposed project, with a negligible impact on their remaining capacity. In addition, the increase of solid waste generation at the project site during operation would represent a fraction (0.14 percent) of the existing capacity of the recycling center serving the project site. Consequently, because the proposed project would not result in a need for additional landfill capacity and would not impede the City's compliance with AB 939, this impact would be *less than significant*.

Threshold	Would the project fail to comply with applicable federal, state, and local statutes and regulations related to solid waste?
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**Impact 4.12-4      Implementation of the proposed project would comply with applicable federal, state, and local statutes and regulations related to solid waste. This impact would be *less than significant*.**

As described in the Regulatory Framework, AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The City has met this goal, and currently has a diversion rate of 54 percent. The City remains committed to continue existing waste reduction and minimization efforts with programs described in Section 4.12.5 (Regulatory Framework). Therefore, as the City currently exceeds the required diversion rate, and because the proposed project would be required to participate in these efforts to minimize waste disposed of in landfills, the proposed project would comply with applicable federal, state, and local statutes. This impact would be *less than significant*.

## Wastewater

### 4.12.7 Environmental Setting

Wastewater collection service will be provided to the project site by the City of San Bernardino. The City's Water Reclamation Department, which operates under the City's Municipal Water Department owns and operates the sewer collection system throughout San Bernardino. All water in the City is treated at the Margaret H. Chandler Wastewater Treatment Plant (WTP), located at 399 Chandler Place in San Bernardino, CA. Along with serving the City of San Bernardino, the WTP serves Loma Linda, East Valley, the San Bernardino International airport, Patton State Hospital, and the unincorporated San Bernardino County areas

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<sup>41</sup> It should be noted that SANBAG has expressed an interested in utilizing all of the exported soil for its Palm Avenue grade separation project, which would mean that no soil would be sent to these facilities.

The WTP has a current capacity of 33 mgd or 36,948 AFY. Between 2005 and 2025 the average wastewater collected at WTP is expected to increase from 30,230 AFY or 20 mgd to 41,426 AFY or 37 mgd in 2025 or approximately 0.5 mgd per year. The WRP is currently treating 24 mgd.

After wastewater is treated at the WTP, the effluent is sent to a tertiary facility known as the Rapid Infiltration Extraction (RIX) Facility. The plant is located in the City of Colton. The RIX facility treats effluent from the City of San Bernardino as well as the City of Colton. The RIX facility receives approximately 24 mgd of effluent, which is treated through natural bio-filtration to meet the state of California Title 22 tertiary standards, in addition to the discharge standards specified in a separate NPDES permit issued to the RIX facility. The RIX facility has a permitted capacity of 40 mgd.

Water from the RIX plant can be used for several purposes like industrial cooling systems and large scale landscaping such as at golf courses. The reclaimed water is currently discharged into the Santa Ana River where it contributes to other existing water flows and adds to the habitat for several kinds of fish and wildlife. The Water Department sees this water as a commodity that can be used to the economic benefit of the Inland Empire and the City of San Bernardino in industry, agriculture, and landscaping. Discharges from the RIX facility are expected to increase from approximately 35,000 AFY in the year 2005 to a projected 48,000 AFY by the year 2025 (SBMWD 2005).

According to City, there are plans to expand the WRP's secondary treatment capacity to 40 mgd. The City is also planning to add tertiary treatment and recycling at the WRP (Coady 2010).

## 4.12.8 Regulatory Framework

### ■ Federal

#### ***Federal Water Pollution Control Act***

The major piece of federal legislation dealing with wastewater is the federal Water Pollution Control Act, which is designed to restore and preserve the integrity of the nation's waters. In addition to the federal Water Pollution Control Act, other federal environmental laws have a bearing on the location, type, planning, and funding of wastewater treatment facilities.

### ■ State

#### ***Water Recycling Act***

Enacted in 1991, the Water Recycling Act established water recycling as a priority in the state. The Act encourages municipal wastewater treatment districts to implement recycling programs to reduce local water demands.

## ■ Regional

### ***Regional Water Quality Board***

Under the Regional Water Quality Board (RWQCB) National Pollution Discharge Elimination System (NPDES) permit system, all existing and future municipal and industrial discharges to surface waters within the City would be subject to regulation. NPDES permits are required for operators of municipal separate storm sewer systems, construction projects, and industrial facilities. These permits contain limits on the amount of pollutants that can be contained in each facility's discharge. Specifically, all development within the City would be subject to the provisions of the County of San Bernardino NPDES Storm Water Permit with the City of San Bernardino as a co-permittee.

## ■ Local

### ***City of San Bernardino General Plan***

- Goal 9.1** Provide a system of wastewater collection and treatment facilities that will adequately convey and treat wastewater generated by existing and future development in the City's service area.
- Policy 9.1.1** Provide for the construction of upgraded and expanded wastewater collection and treatment improvements to support existing and new development, and to meet usage requirements and maximize cost efficiency, especially in areas where existing systems are deficient.
- Policy 9.1.3** Require new development to connect to a master planned sanitary sewer system in accordance with the Department of Public Works' "Sewer Policy and Procedures." Where construction of master planned facilities is not feasible, the Mayor and Common Council may permit the construction of interim facilities sufficient to serve the present and short-term future needs.

### **Consistency Analysis**

The proposed project would comply with all federal, state, and local regulations related to wastewater. As a distribution and warehouse facility, the proposed project is not anticipated to produce a large amount of wastewater. Therefore, the proposed development would not conflict with the regulations and policies set forth by the City.

## 4.12.9 Project Impacts and Mitigation Measures

### ■ Analytic Method

In general, wastewater is generated from indoor water uses, and thus, is impacted by water conservation efforts. The City of San Bernardino recommended a wastewater generating rate of 100 gallons per employee per day be applied to the proposed project, as the project would serve as a warehouse and distribution facility and would not create wastewater as a result of daily operations. Based on the estimated 500 employees, the project would generate 50,000 gallons of wastewater per day, as shown in Table 4.12-9 (Projected Wastewater Generation).

<b>Type of Land Use</b>	<b>Number of Employees*</b>	<b>Wastewater Generation Rate</b>	<b>Projected Wastewater*</b>
Warehouse	500	100 gallons/employee/day	50,000 gallons/day

SOURCE: Commons 2007

\* For the purposes of this section, this EIR is assuming the project will employ 500 workers

### ■ Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2011 CEQA Guidelines and City-specific thresholds, where applicable. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments

### ■ Less-Than-Significant Impacts

Threshold	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
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**Impact 4.12-5**      **Implementation of the proposed project would not exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board. This impact would be *less than significant*.**

The City as a whole operates under the Santa Ana RWQCB, and currently meets all Santa Ana RWQCB wastewater treatment requirements. The proposed project would develop a 678,275 sf distribution center. For this reason, the proposed project would not discharge pollutants such as industrial sludge,

noxious gasses, medical wastes, or radioactive materials. Waste produced by the proposed project would include typical employee waste.

To ensure that the proposed project would not exceed wastewater treatment requirements, the proposed project would comply with San Bernardino Municipal Code Chapter 13.32, which regulates wastewater discharges and the requirements established by the Santa Ana RWQCB. In particular, Section 13.32.300 which discusses discharge prohibitions.

Additionally, the project would be required to follow all federal and state regulations pertaining to wastewater discharge. With adherence to these requirements and those established by the Santa Ana RWQCB, the proposed project would result in a *less-than-significant* impact to wastewater treatment requirements and would not require any mitigation measures.

Threshold	Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Threshold	Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**Impact 4.12-6      Implementation of the proposed project would not require the construction of new water or wastewater treatment facilities, nor would implementation of the project increase wastewater generation such that treatment facilities would be inadequate to serve the proposed projects projected wastewater flows, in addition to the provider's existing commitments. This impact would be *less than significant*.**

As discussed previously, the proposed project would develop a warehouse/distribution center that would employ 500 workers. Wastewater generated by the proposed project would primarily consist of employee waste. As a result, the proposed project would generate approximately 50,000 gallons of wastewater per day. The Margaret H. Chandler Wastewater Treatment Plant, which currently treats a wastewater volume of 24 mgd, has the capacity to treat 33 mgd. The proposed project would increase the daily wastewater volume by less than 0.1 percent. As a result, the existing wastewater treatment facility would be able to handle the incremental additional wastewater volume produced by the proposed project in addition to providing service for existing customers (Coady 2010). This impact would be *less than significant*.

The proposed project would construct sewer infrastructure on the site that would connect to the existing utility infrastructure under Industrial Parkway. The existing sewer infrastructure would not require expansion. The developer would be required to pay all applicable development fees associated with wastewater/sewer development. The City requires an inspection fee of \$26.19 in addition to a sewer connection fee of \$310.64 per 3,000 sf applied to industrial developments. Because the existing infrastructure requires no expansion, and the project would only require installation of new sewer infrastructure on site to connect to the existing conveyance facilities, the proposed project would have a less-than-significant impact on wastewater infrastructure. To ensure the project's wastewater impacts

remain less than significant, the project would be required to install ultra low-flush toilets and motion-activated wash basins, per the City's request. These requirements would ensure that project impacts related to wastewater would remain *less than significant*.

## **Stormwater Drainage**

### **4.12.10 Environmental Setting**

San Bernardino's planning area encompasses 70 square miles, much of which is paved and impervious to stormwater. Unlike sewage, which goes to treatment plants, urban runoff flows untreated through the storm drain system. Anything thrown, swept, or poured into the street, gutter, or a catch basin (the curbside openings that lead into the storm drain system) flows directly into channels, rivers, and eventually the ocean. Storm drains and flood control facilities within the City include: channels, storm drains, street waterways, natural drainage courses, dams, basins, and levees and are administered by a variety of agencies.

The U.S. Army Corps of Engineers plans, designs, constructs, and operates major regional flood protection facilities such as the Santa Ana River. The operation and maintenance of these facilities is often turned over to a local flood control agency, such as the San Bernardino County Flood Control District (SBCFCD). The SBCFCD provides the larger infrastructure (dams, basins, channels, and storm drains to convey flow) for flood control facilities for the City of San Bernardino, and the City (under its Storm Drain System) provides local storm drains that feed into the SBCFCD system. The City's Public Works Department is responsible for the planning, design, construction, and maintenance of any flood control facilities required for local drainage within City limits.

Runoff from the project site generally drains from north to southeast. As the site is undeveloped, runoff typically remains on site until absorbed. Further, runoff from the adjacent I-215 Freeway flows directly onto the project site through drains. Due to the undeveloped nature of the area surrounding the project site, no stormdrain system has been established along Industrial Parkway near the project site and no development of a future system is planned for the project area. City of San Bernardino storm drain policy is that 100-year storm flows are to be contained within the street right-of-way and 50-year flows are to be contained between the curbs. Cable Creek Channel flows south east of the project site. This channel connects to the Cajon Creek Wash through the Devil Creek Diversion. Stormwater eventually discharges to the Santa Ana River.

### **4.12.11 Regulatory Framework**

#### **■ Federal**

All federal regulations applicable to stormwater drainage and water quality are discussed in Section 4.7 (Hydrology/Water Quality).

## ■ State

All state regulations applicable to stormwater drainage and water quality are discussed in Section 4.7 (Hydrology/Water Quality).

## ■ Regional

All regional regulations applicable to stormwater drainage and water quality are discussed in Section 4.7 (Hydrology/Water Quality).

## ■ Local

### **City of San Bernardino General Plan**

- Goal 9.4** Provide appropriate storm drain and flood control facilities where necessary.
- Policy 9.4.1** Ensure that adequate storm drain and flood control facilities are provided in a timely manner to protect life and property from flood hazards.
- Policy 9.4.2** Upgrade and expand storm drain and flood control facilities to eliminate deficiencies and protect existing and new development.

### **Consistency Analysis**

The proposed project is intended to adhere to all federal, state, and local regulations related to stormwater resources. The proposed project would adhere to the applicable rules and regulation. The project would include natural stormwater detention basins to reduce the amount of runoff created from the project site. Therefore, the proposed development would not conflict with the regulations and policies set forth by the City.

## **4.12.12 Project Impacts and Mitigation Measures**

### ■ Analytic Method

The proposed project would result in a new 678,275 square feet (sf) warehouse/distribution facility. To determine whether implementation of the proposed project would result in impacts on stormwater drainage, the resulting changes in drainage as a result of the proposed project were compared with the existing stormwater drainage patterns and infrastructure to determine if the project would require new or modified stormwater drainage facilities.

## ■ Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2011 CEQA Guidelines and City-specific thresholds, where applicable. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact if the proposed project would:

- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## ■ Less-Than-Significant Impacts

Threshold	Would the project require or result in the construction of stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
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**Impact 4.12-7      Implementation of the proposed project would not require the construction of new stormwater drainage facilities or the expansion of existing facilities. This impact would be *less than significant*.**

The proposed project would develop a 38.4-acre vacant lot, creating impervious surfaces across approximately 88 percent of the project site. Given that the project site is permeable in its present state, runoff from the project site could be increased during periods of heavy precipitation. Further, as there is no existing storm drain system established for the project area, the possible increase in runoff has the potential to create a significant impact.

During construction and subsequent operation of the proposed project, the developer would be required to apply for the applicable stormwater permits required of sites in excess of one acre. This would include the General Permit for Storm Water Discharge from Construction Activity (Section 8.80.502 of the Storm Water Ordinance). This would reduce the potential for stormwater-related impacts.

As stated previously, there are no existing stormdrain systems established to support the project site. As a result, the permeable site would become impervious, creating a high potential for runoff. Industrial Parkway has more than sufficient capacity to accommodate 100-year flows generated from the development (Stantec 2007). The project would be designed to encourage runoff to flow away from the building. Half of the proposed building would drain to the north side, while the other half would drain to the south side of the project site. A vegetated swale would be constructed along the northern edge of the project site (adjacent to I-215). Runoff from the building, as well as excess parking lot runoff and off-site flows, would be directed to the vegetated swale to allow for permeation. Excess runoff not absorbed would be conveyed through the continuous vegetated swale to the eastern end of the site. A 30-inch pipe would be constructed to convey all excess stormwater runoff to the Cable Creek Channel. A similar vegetated swale runoff system would be constructed along the southern portion of the project site. Flows from the southern end of the building, as well as the parking lots would be directed to the vegetated swale. The swale would treat and absorb runoff. Any excess water that is not absorbed through the vegetated swale would be outlet to Industrial Parkway at several locations, reducing the potential for

flooding. From Industrial Parkway, the runoff would be diverted to Cable Creek Channel, eventually reaching the Santa Ana River (Stantec 2007).

The vegetated swale, which would follow water quality best management practice and be designed in accordance with the project’s WQMP, as outlined in project requirement PR4.7E and mitigation measure MM4.7-1 (Section 4.7 [Hydrology/Water Quality]), would consist of grass maintained at a height of 4 to 6 inches. Implementation of this best management practice would reduce pollutant discharges and provide maximum site permeability and runoff reduction. All rooftop and parking lot runoff would be diverted to the proposed vegetated swales. Additionally, parking lot aisles would be constructed to the minimum allowable distance, reducing the amount of impervious area. Landscaping for the proposed project would utilize native and drought-resistant trees, plants, and shrubs to utilize excess runoff and minimize the need for watering.

Therefore, with implementation of PR4.7E and MM4.7-1, the proposed project would have *less-than-significant* stormwater impacts.

### 4.12.13 Cumulative Impacts: Water Supply, Solid Waste, Wastewater, and Stormwater

The geographic context for the cumulative analysis is the service areas for the utility providers, including the City of San Bernardino and the surrounding region of San Bernardino County as they relate to each of the following resources.

#### ■ Water Supply

Threshold	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
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The cumulative analysis was completed using water provider projections for the service area. Currently, the SBMWD provides water service to the project area. Development of cumulative projects within the SBMWD’s service area would demand additional quantities of water, depending on net increases in population, square footage, and intensity of uses. These projects would contribute to the overall regional water demand, which could be potentially significant. According to the City’s 2005 UWMP, the SBMWD service area future water demands are anticipated to be 73,504 AFY by 2025. The SBMWD planned water supply is expected to meet that demand, as it is projected to supply 73,504 AFY by 2025. Although all water providers are required to prepare plans to ensure that adequate water supplies exist for future growth, there is ongoing controversy surrounding the state’s water supply and distribution efforts. SBMWD has indicated they can accommodate the additional demand from the proposed project in addition to future growth assumed in the UWMP. In addition, the implementation of conservation measures on a project-specific basis and water shortage contingency plans would further reduce additional water demand. Future development is required to adhere to Section 10910 of the California Water Code. The proposed project is projected to require 87.7 AFY of water, which is only 0.17 percent

of the projected 2010 water demand. Accordingly, the proposed project would not result in a cumulatively considerable contribution to an impact on water supply. Therefore, the cumulative impact to water supply would be *less than significant*.

Threshold	Would the project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
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Continued development within the SBMWD's service area will contribute to the need for new or expanded SBMWD infrastructure facilities. In turn, the SBMWD will construct new or expand existing water supply and water treatment facilities, as required, which could result in significant impacts to the environment. Due to the partially undeveloped nature of the service area, it is expected that expansion of water conveyance and/or treatment infrastructure could result in significant cumulative environmental effects. However, because the proposed project would not require the expansion of existing infrastructure, only connections to existing conveyance infrastructure, and because there would be adequate capacity in the existing water treatment plant to serve future demand, the contribution of the proposed project would not be cumulatively considerable. Consequently, the project's contribution to cumulative water infrastructure impacts would be *less than significant*.

## ■ Solid Waste

Threshold	Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?
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The total remaining capacity of the three landfills that would serve the project area is just under 82 million cubic yards. The combined daily capacity of all three landfills is 11,600 tons per day. The proposed project, together with all cumulative development in the City, was accounted for by the City's General Plan. Although the Colton, San Timoteo, and Mid-Valley Landfills have sufficient capacity to accommodate all solid waste from projected build-out under the General Plan, due to the current growth rates throughout San Bernardino County, this is a potentially significant cumulative impact.

Soil exported from the project site would not be disposed of in the area's servicing landfills. Any exported soil would either be utilized on other construction sites in the area (likely the SANBAG grade separation project adjacent to the project site) or be accommodated at the three identified facilities that can accept clean fill dirt. There would be no impact to solid waste as a result of soil export. Operation of the proposed project would only add 2.6 tons per day to the landfill, which represents less than 0.1 percent of the permitted daily capacity. Further, the proposed project has been included in growth forecasts in the General Plan as well as in other regional planning documents that account for growth in the region. The proposed project would be required to comply with City and County recycling ordinances, which would reduce operational waste from the project. For the foregoing reasons, the incremental contribution of the proposed project of less than one-tenth of one percent would not be considered cumulatively considerable. Consequently, the cumulative impact of the project would be *less than significant*.

Threshold	Would the project fail to comply with applicable federal, state, and local statutes and regulations related to solid waste?
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Development of the proposed project is expected to continue to comply with federal, state, and local statutes and regulations. As all projects must comply with the applicable federal, state, and local statutes and regulations as outlined above and in Section 4.12.5, a less-than-significant cumulative impact would occur. The proposed project is subject to similar requirements. Therefore, the cumulative impact of the proposed project is *less than significant*.

## ■ Wastewater

Threshold	Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
Threshold	Would the project require or result in the construction of new or expanded wastewater treatment or conveyance facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Threshold	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Development of cumulative projects within the project's general area would generate additional quantities of wastewater, depending on net increases in population, square footage, and intensification of uses. These projects would contribute to the overall regional demand for wastewater treatment service. WRP, which serves the City of San Bernardino, is currently operating at approximately 82 percent of capacity and is projected to exceed available capacity by 2025. In addition, depending upon future growth within the City of San Bernardino, it is estimated that the plant could be required to treat 37 mgd. As expansion is planned at the MHCWRP, development within the City will continue to expand. The proposed project would increase the current daily wastewater volume by less than 0.1 percent. The planned expansion at the MHCWRP would allow WRP to process greater amounts of wastewater. Therefore, the contribution of the proposed project to this impact would not be cumulatively considerable. Consequently, the cumulative impact of the project would be *less than significant*.

## ■ Stormwater

Threshold	Would the project require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which would cause significant environmental effects?
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Development of cumulative projects within the proposed project's general area would generate additional stormwater runoff as previously pervious land becomes impervious. This applies more to projects located outside of the City's center, where development has not occurred. These projects would contribute to the overall amount of stormwater, which could be potentially significant. However, the proposed project would implement best management practices to capture runoff created as a result of

the proposed project's development and store this runoff until it is absorbed, thereby reducing the overall amount of runoff generated by the project site. Other development projects would be anticipated to include similar best management practices to reduce stormwater runoff, in compliance with local codes and NPDES permit requirements. Therefore, this project's cumulative impact would be *less than significant*.

#### 4.12.14 References

California Integrated Waste Management Board (CIWMB). 2007. Estimated Solid Waste Generation Rates for Industrial Establishments. <http://www.ciwmb.ca.gov/Wastechar/WasteGenRates/Industrial.htm> (accessed January 29, 2008), November 1.

Coady, Andy. 2010. Personal communication with SBMWD Environmental Control Officer, October 12.

San Bernardino Municipal Water Department (SBMWD). 2005. *2005 Urban Water Management Plan*, December.

———. 2008. *Water Supply Assessment Report*, April 7.

Stantec Consulting, Inc. 2007. *Hydrology and Hydraulics Study, City of San Bernardino*. November 2.

Washington, Gracie. 2010. Personal communication with Integrated Waste Field Inspector, Integrated Waste Management Division, November 1.

