3.13 UTILITIES AND SERVICE SYSTEMS

3.13.1 INTRODUCTION

This section describes the existing utilities and service systems that would support the proposed Redevelopment Plan Area, and the potential project demands placed on those facilities by the proposed Updated 2009 Redevelopment Plan. Utilities and service systems described below include the provision of water and wastewater and disposal of solid waste. In response to the Notice of Preparation for this environmental impact report (EIR), a comment letter was received from East Bay Municipal Utilities District (EBMUD). All of the comments received are addressed in the impact assessment presented below.

3.13.2 ENVIRONMENTAL SETTING

3.13.2.1 Existing Conditions

The proposed Updated 2009 Redevelopment Plan includes potential development of the Hill Town and Sycamore Crossing sites, which are located in an urbanized area within the City of Hercules. The proposed project consists of adding new land to the existing redevelopment project area and amending the land use designations and zones for each of two sites, which together comprise the Added Area.

Water Service

The City of Hercules receives water service from the East Bay Municipal Utilities District (EBMUD). In 2005, EBMUD delivered an average flow of 210 million gallons per day (mgd) serving over 325,000 service accounts.

EBMUD draws its primary supply of water (approximately 90 percent) from the Mokelumne River in the Sierra Nevada Mountain Range. EBMUD delivers its water supply through a system of reservoirs, aqueducts, water treatment plants, pumping plants, and distribution facilities. The City of Hercules is served by the 22.3-million-gallon Mahoney Reservoir located in Pinole, California. Based on current projections of the UWMP, the Mokelumne watershed is of sufficient size to meet the near term water needs of the EBMUD and the City of Hercules, including the proposed Redevelopment Plan Area.

EBMUD Urban Water Management Plan

An urban water management plan (UWMP) is required for every urban water supplier providing more than 3,000 acre-feet of municipal water annually or providing water to more than 3,000 customers. On November 26, 1985, EBMUD adopted its first UWMP. Since 1985 the plan has been revised and updated

every five years. The most recent UWMP was adopted on November 22, 2005, by the EBMUD Board of Directors; the UWMP is a long-range planning document that reports on the current and projected water usage, water supply programs, and conservation and recycling programs. The 2005 UWMP summarizes EBMUD's demand and supply projections in 5-year increments for a 25-year planning horizon (through 2030), and reflects the latest actual and forecast values. The UWMP presents water supply and availability, including the underlying assumptions, as derived from EBMUD's hydrologic model. It also contains planned upgrades to the water system to ensure that appropriate future levels of service are met.

EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand attributed to changes in development patterns. The demand projections indicate both densification and land use changes in all existing land use classifications, thus increasing the overall demand. The UWMP projects water demand over time, accounting for estimated variations in demand usage less conservation and recycled supply sources. For planning purposes, the demands are estimated in five-year increments, but it is recognized that actual incremental amounts would occur in shorter increments as new users come on line. Periodically, EBMUD updates the demand projections to reconcile these variations, and the UWMP is updated as appropriate at each five-year cycle.

Demand Projections

Water consumption within the EBMUD service area has remained relatively stable in recent years in spite of population growth. Since the 1970s, water demand has ranged from 200 to 220 mgd in non-drought years. EBMUD has water rights permits and licenses that allow for delivery of up to a maximum 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff and the senior water rights of other users.

Supplemental Water Supply and Demand Management

The goals for meeting EBMUD projected water needs in the service area and increased water reliability rely on three components: supplemental supply, water conservation, and recycled water. The UWMP describes EBMUD's supplemental water supply project alternatives to meet its long-term water demand as well as supplemental water projects, including the development of groundwater storage within EBMUD's service area.

Consistent with state law, a water supply assessment was requested by EBMUD to be prepared for the Redevelopment Area. However, in a March 12, 2008, response letter from EBMUD, included in **Appendix 3.13** of this draft EIR, EBMUD suggested that this step would be overly speculative at the programmatic level and that individual water supply assessments should be completed for future

proposed projects within the Redevelopment Plan Area. In its response to the NOP for this draft EIR, EBMUD confirmed that a WSA would be required for individual development projects that could occur under the Updated 2009 Redevelopment Plan.

Wastewater Service

Wastewater in the Updated 2009 Redevelopment Plan Area is collected primarily by sewer lines owned and maintained by the City of Hercules. The collected wastewater is the treated at the Pinole/Hercules Wastewater Treatment Plant, which serves the City of Hercules and the City of Pinole and is operated by the Pinole-Hercules Wastewater Joint Powers Authority (JPA). The treatment plant is located on Tennent Avenue in the City of Pinole. The collection system includes separate domestic and industrial sewers and related pumping facilities. Untreated wastewater is piped to the City's treatment plant through pipes, using both gravity flow and lift stations where appropriate. The Pinole/Hercules Wastewater Treatment Plant has the capacity to treat 4.06 mgd. The City of Hercules has implemented a wastewater-sampling program, including the implementation of a confined space entry program, to comply with Occupational Safety and Health Administration (OSHA) regulations. In addition, the cities of Pinole and Hercules are in the process of upgrading and planning future plant capacity.

Solid Waste

Richmond Sanitation is the solid waste service provider for the City of Hercules. The City's solid waste is disposed of at the Potrero Hills Landfill, which is approximately 28.5 miles northeast of the City of Hercules. The Potrero Hills Landfill opened in 1986 and owns 1,400 acres of property with 190 acres of waste area to date. The facility receives an average of 3,400 tons of fill daily.

Electricity

Electricity is provided and distributed in Hercules by Pacific Gas and Electric (PG&E) and by the Hercules Municipal Utility (HMU). HMU would supply electricity to the Updated 2009 Redevelopment Plan Area.

Natural Gas

Natural gas is provided and distributed to the Updated 2009 Redevelopment Plan Area by PG&E.

3.13.3 REGULATORY FRAMEWORK

3.13.3.1 California Regulations

Urban Water Management Planning Act

California State Assembly Bill 797 (*California Water Code* Section 10610 et seq.), adopted in 1983, requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or more than 3,000 acre-feet of water on an annual basis to prepare a UWMP. The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. UWMPs must be updated every five years in years ending in zero and five.

Senate Bill 610

Senate Bill (SB) 610 requires that projects subject to the California Environmental Quality Act (CEQA) that would be supplied with water from a public water system that identifies groundwater as a source prepare a specified water supply assessment. These water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in *Water Code* Section 10912[a]) subject to CEQA. This legislation also expands the requirements for certain types of information in a UWMP, including an identification of any existing water supply entitlements, water rights, or water service contracts held relevant to the water supply assessment for a proposed project, and a description of water deliveries received in prior years.

Under Sections 10910–10915 of the *California Water Code*, a WSA is required by law for any development that meets the following thresholds:

1. A proposed residential development of more than 500 dwelling units.
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4. A proposed hotel or motel, or both, having more than 500 rooms.
5. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
6. A mixed-use project that includes one or more of the projects specified in this subdivision.

7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

Senate Bill 221

Senate Bill (SB) 221 prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). This requirement also applies to increases of 10 percent or more of service connections for public water systems with fewer than 500 service connections. The law defines criteria for determining sufficient water supply, such as using normal, single-dry, and multiple-dry year hydrology and identifying the amount of water that the supplier can reasonably rely on to meet existing and future planned uses.

Title 24

Buildings constructed after June 30, 1977, must comply with standards identified in Title 24 of the *California Code of Regulations*. Title 24 requires the inclusion of state-of-the-art energy conservation features in building design and construction, including the incorporation of specific energy-conserving design features, use of non-depletable energy resources, or a demonstration that buildings would comply with a designated energy budget.

California Integrated Waste Management Act

As many of the landfills in the state are approaching capacity and finding a location for new landfills becomes increasingly difficult, the need for source reduction, recycling, and composting has become readily apparent. In response to this increasing solid waste problem, in September 1989 the state assembly passed Assembly Bill (AB) 939, known as the California Integrated Waste Management Act. The act required every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) with its solid waste management plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. Senate Bill 2202 mandates that jurisdictions continue 50 percent diversion on and after January 1, 2000. The purpose of AB 939 is to facilitate the reduction, recycling, and reuse of solid waste to the greatest extent possible. The consequences of noncompliance with the goals and timelines set forth within AB 939 can be severe, as the bill imposes fines of up to $10,000 per day on cities and counties that do not meet these recycling and planning goals. The 2004 diversion rate for the City was 53 percent, which complies with the goals specified in AB 939 (CIWMB 2008).

3.13.3.2 Local Policies and Ordinances

City of Hercules General Plan

The City of Hercules General Plan (*General Plan*) contains goals and policies regarding public services, utilities, and services systems. The following *General Plan* policies are relevant to the proposed Redevelopment Plan:

Land Use Element

Policy 9A: Development applications shall be reviewed to determine if adequate solid waste disposal capacity exists to serve the project and that the project includes adequate recycling facilities.

Open Space and Conservation Plan

Policy 7b: Ensure that the new development pays its share of the costs associated with the provision of facilities to conform to EBMUD requirements for water conservation by attaching project-specific mitigation requirements as conditions of approval.

Policy 8a: The City shall ensure that new development pays its share of the incremental capacity costs associated with the provision of wastewater treatment facilities by attaching project-specific mitigation as conditions of approval.

3.13.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the *State CEQA Guidelines*, the project would have a significant impact with respect to utilities and service systems if it would

- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significance environmental effects;
- have insufficient water supplies to serve the project from existing entitlements and resources, with new or expanded entitlements needed;
- 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;

- 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 statues and regulations related to solid waste; or
- require new or expanded electrical or natural gas facilities, the construction of which could cause significant environmental effects.

3.13.5 IMPACTS AND MITIGATION MEASURES

3.13.5.1 Issues Not Discussed Further

The City of Hercules obtains electric power and natural gas from PG&E and HMU. Development that could occur under the Updated 2009 Redevelopment Plan would have relatively small electric power and natural gas demand compared to the capacity of these utilities and could be supplied from the existing power generation and natural gas supply infrastructure. The project thus is not anticipated to require new or expanded electrical or natural gas facilities, and this topic is not discussed further.

3.13.5.2 Project Impacts

Impact USS-1: **Future buildout of the Updated 2009 Redevelopment Plan would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, but could require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or increase future wastewater generation beyond wastewater treatment capacity.** ***(Potentially Significant; Less than Significant with Mitigation)***

The proposed project consists of establishing the Updated 2009 Redevelopment Plan and does not include or request approval of any development or improvements on the actual merged project sites. Therefore, approval of the proposed project would not directly generate any wastewater that could exceed wastewater treatment capacity. However, approval of the requested discretionary actions for the Updated 2009 Redevelopment Plan would facilitate future land development and capital improvements, which would generate wastewater.

The most common form of wastewater generated by subsequent redevelopment-related projects is domestic sewage. Domestic sewage is typically treated at wastewater treatment facilities that are subject to RWQCB wastewater regulations and standards. Subsequent projects that would result from the 2009 Redevelopment Plan are not expected to generate unique or unusual wastewater, and any proposed discharge of unique or unusual wastewater into the sewer system would require a permit from the City

of Hercules. This permit would require various technical information and water quality data, and the City would not issue a discharge permit until it has confirmed that the treatment facilities can treat the proposed effluent. Compliance with these requirements would ensure that impacts related to wastewater treatment requirements would be less than significant.

The Pinole/Hercules Wastewater Treatment Plant has a wastewater capacity of 4.06 mgd. The UWMP projects that in 2010 (i.e., the assumed buildout year for the Hill Town project) the amount of collected and treated wastewater demand would be 3.6 mgd; therefore, it is anticipated that the plant would have sufficient capacity to serve the City, including wastewater that would be generated by the Hill Town project. Wastewater impacts related to the Hill Town project would be less than significant. At the time that any other specific project-level development is proposed within the Updated 2009 Redevelopment Plan Area, a project-level environmental review of wastewater impacts would be required. This would include a formal review of wastewater capacity to determine if new or expanded wastewater infrastructure would be needed to serve the development, to be analyzed in compliance with CEQA.

Given the conceptual land uses anticipated for the Added Area and the available capacity of the Pinole/Hercules Wastewater Treatment Plant, wastewater treatment capacity could be a concern for other future development projects in the Updated 2009 Redevelopment Plan area and may be considered potentially significant. The JPA is currently studying options to accommodate future wastewater needs. **Mitigation Measure USS-1** requires subsequent development projects to obtain confirmation from the wastewater treatment provider that adequate wastewater treatment capacity is available prior to the development of a specific project. With incorporation of **Mitigation Measure USS-1**, impacts related to wastewater treatment capacity would be reduced to less than significant.

MM USS-1: Prior to the approval of any subsequent development projects within the proposed Redevelopment Project Area, a project applicant shall obtain confirmation from the wastewater treatment provider that adequate wastewater treatment capacity is available to serve such development. Such confirmation will be placed in the project file of all appropriate City Departments.

Significance after Mitigation: Less than Significant.

Impact USS-2: **The proposed project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significance environmental effects.** ***(Less than Significant)***

The proposed project consists of establishing a new redevelopment project area and converting the land use designations of two sites. The proposed Hill Town project would be required to meet the Hercules Engineering Department's storm drain facilities requirements to comply with the policies of the *City of Hercules General Plan*. The Hill Town project would include new or upgraded storm drain facilities with the capacity to handle stormwater flows from the project site without increasing peak flows from the site to off-site locations.

Any other subsequent projects would be required to meet the Hercules Engineering Department's storm drain facilities requirements to comply with the policies of the *General Plan* and would require project-level environmental review. Therefore, the proposed Redevelopment Plan would not affect existing storm drainage infrastructure, and would not result in significant impacts to the stormwater drainage system.

Mitigation Measures: None required.

Impact USS-3: **Future buildout of the proposed project would result in an increase in water demand.** ***(Potentially Significant; Less than Significant with Mitigation)***

As discussed, the proposed project consists of adding the Hill Town and Sycamore Crossing sites to the existing Redevelopment Plan, which would facilitate future land development and capital improvements, and generate additional water demand.

Subsequent developments in the Updated 2009 Redevelopment Plan would be located within the EBMUD service area. As described in the environmental setting section, EBMUD has adopted a UWMP that identifies how the districts future water demands will be met. Currently, the district satisfies its water demands through water runoff from the Mokelumne River watershed. No water supply deficiencies are existing or projected. In addition, EBMUD has active and executed agreements with surrounding water districts such as SFPUC-Hayward-EBMUD and the City of Hayward to provide facilities that allow short-term limited water transfers during emergency situations. EBMUD is also a member of the Water Agency Response Network (WARN), which is an Omnibus Mutual Aid/Assistance Agreement with signatories agreeing to provide assistance with water resources if available. The EBMUD has also adopted a water supply management project as a long-term planning guide for providing water throughout the EBMUD service district through two principal options: the Freeport Regional Water Project and the Bayside Groundwater Project. The Freeport Regional Water Project would have the ability

to divert up to 185 mgd from the Sacramento River near the town of Freeport, delivering up to 100 mgd of water to EBMUD during dry years and reducing the need for rationing during drought. The Bayside Groundwater Project involved groundwater injection/extraction operations in the San Leandro/San Lorenzo area. Treated water from EBMUD's distribution facilities would be injected into existing wells for future extraction.

The City of Hercules requested that EBMUD prepare a WSA for the proposed Updated 2009 Redevelopment Plan pursuant to Sections 10910–10915 of the *California Water Code* and Senate Bill 610. In their response letter dated March 12, 2008 (as contained in **Appendix 3.13**), EBMUD states, "… a WSA will not be required for the Proposed Hercules Redevelopment Project Area No. 3 [Updated 2009 Redevelopment Area], because, at this stage, it is not a project according to the definition in *Water Code* Section 10912." The district further notes that the City should contact EBMUD to request a WSA for specific development projects within the Updated 2009 Redevelopment Plan as they are proposed. Additionally, in a response letter to the NOP for this project dated December 8, 2008, EBMUD further stated that individual projects proposed within the Redevelopment Plan Area should contact EBMUD in the future to request WSAs, pursuant to Section 15155 of CEQA. (See **Appendix 3.13**.)

The UWMP projects adequate supplies to serve its service area through 2030. The Hill Town project site is presently designated for industrial use under the *General Plan*, and this land use was factored into EBMUD's water demand projections in the 2005 UWMP. Industrial land uses typically have much higher water demand rates than residential uses, and thus the proposed Hill Town project would have considerably lower water demand than that included in the UWMP demand projections. Water supply impacts for the Hill Town project would, therefore, be less than significant. However, the Hill Town project and any other project that could be developed under the Updated 2009 Redevelopment Plan would be required to have a WSA showing adequate water supply capacity to serve the project prior to project approval. **Mitigation Measure USS-3** addresses this requirement.

MM USS-3: Prior to development, proponents of projects subject to the requirements for water supply assessments shall be required to obtain a water supply assessment confirming the proposed development's water demand and documenting adequate supply.

Significance after Mitigation: Less than Significant.

Impact USS-4: **Future buildout of the Updated 2009 Redevelopment Plan Area would result in an increase solid waste generation, but would not exceed landfill capacity, nor would it fail to comply with federal, state, and local statues and regulations related to solid waste.** ***(Less than Significant)***

Currently, the City of Hercules contracts with a waste disposal company that transports trash to a landfill with sufficient capacity to handle the City's solid waste disposal needs. The City's solid waste is taken to the Potrero Landfill, which is not expected to reach capacity for 35 or more years. Therefore, there is sufficient landfill capacity to serve the proposed Redevelopment Plan Area.

The proposed project would also comply with federal, state, and local statutes and regulations related to solid waste. Construction and operation of future residential, commercial, and recreational uses in the Updated 2009 Redevelopment Plan area would generate typical solid waste, and would not generate uniquely hazardous waste, industrial by-products, or demolition materials. Therefore, the proposed project would have no impact related to infractions with solid waste statutes or regulations, and would not exceed landfill capacity required to accommodate the project's solid waste disposal needs.

Mitigation Measures: None required.

3.13.6 CUMULATIVE IMPACTS

Impact USS-5: Implementation of the proposed Updated 2009 Redevelopment Plan would not contribute to a substantial cumulative impact on utilities and service systems. (*Less than Significant*)

Project-level impacts from the proposed Hill Town project would be reduced to a less than significant level by the mitigation measures identified above, and these measures would also reduce the Hill Town project's contribution to potential cumulative utility and service system impacts. Any other development projects that could occur under the plan would be the same as the project impacts identified above in **Section 3.13.5**. Individual development projects, including the proposed Sycamore Crossing project, would be subject to project-level environmental review, which would include analysis of cumulative impacts.

The service providers (wastewater, water, and solid waste) in the City were contacted directly in preparation of this EIR. They analyzed the project's effects on their systems in light of other approved, pending, and future development projects. The Pinole–Hercules Wastewater Treatment Plant, East Bay Municipal Utility District (EBMUD), and the Potrero Hills Landfill have planned for future growth consistent with the *General Plan*. In all cases, infrastructure and service providers have indicated that the proposed project could be accommodated through existing and planned systems and/or entitlements when taken into consideration with planned future growth consistent with the *General Plan*. Therefore, no cumulative impacts to public services, utilities, and service systems would result from the proposed project.