

SECTION 4.0
CITY OF RICHMOND
WASTEWATER SERVICES

4.1 Overview

The City of Richmond encompasses approximately 56.1 square miles on the shores of San Pablo and San Francisco Bays. Incorporated August 7, 1905, the City has a population estimated by the State Department of Finance of 103,828 residents. The City of Richmond is bounded on the north by San Pablo Bay the unincorporated community of Tara Hills and the City of Pinole, on the south by the cities of El Cerrito and Berkley, on the east by unincorporated El Sobrante community and on the west by the San Francisco and San Pablo Bays. The City's Sphere of Influence (SOI) encompasses the entire incorporated territory of the City as well as an additional 18 square miles of unincorporated territory to the north and east of the City.

The City of Richmond receives water service from the East Bay Municipal Utility District (EBMUD), which provides service to the entire city. Wastewater services within the City are provided by three agencies, the City of Richmond through their subsidiary Municipal Sewer District, the West County Wastewater District (WCWD) and Stege Sanitary District (SSD). Each agency provides services within a different geographic section of the City. The City of Richmond through their subsidiary district, the Richmond Municipal Services District, provides wastewater services to central Richmond, a small community of homes east of and adjacent to El Cerrito (within the City of Richmond) and also processes and treats the leach water from the County landfill. This area encompasses approximately 13.5 square miles, and comprises 24% of the City land area, including incorporated as well as unincorporated areas. WCWD serves the northern portions of the City, the unincorporated community of El Sobrante and also approximately 45 parcels via contract in East Richmond Heights. SSD provides services to a portion of the City along the west side of Interstate 580 adjacent to the City of El Cerrito, as well as providing service to the City of El Cerrito and the unincorporated community of Kensington. SSD also provides service to approximately 97 parcels via contract to a residential area located just east of El Cerrito. The City does not provide wastewater service to any parcels outside its corporate boundaries.

While the City provides wastewater collection, conveyance, treatment, and disposal services, the City contracts with Veolia Water North America to operate and maintain the wastewater treatment facility. In 2006 the City was sued by the environmental watchdog group Baykeeper, over repeated spills of raw sewage into San Francisco Bay. The City and Baykeeper have entered into a settlement agreement for the lawsuit, which requires the City to maintain, replace and improve the City's sewer collection system in order to prevent future spills. Treatment is

provided at the City owned Wastewater Treatment Plant located at 601 Canal Boulevard in Richmond.

The City's profile for wastewater service is shown in *Table 4.1*. A map of the City's boundary and current SOI are shown in *Figure 4.2*.

Table 4.1
City of Richmond
Wastewater Service Information

Service Area / Financial Summary	
Public Works Department:	601 Canal Boulevard Richmond, CA 94804 (510) 412-2026 www.ci.richmond.ca.us
Service Area:	13.5 square miles
Population:	103,828 (Year 2007) City Wide Approximately 68,000 within sewer service area Average Annual Growth Rate = 1.1%
Sewer Enterprise Fund Operating Budget (FY 2007/2008):	Revenues / Expenditures:\$15,113,882 / \$13,826,798
Net Assets:	Sewer Fund Net Assets 06/30/2007: \$ unknown
Wastewater Service Data	
Services	Wastewater collection, conveyance, treatment, disposal
Number of wastewater service accounts:	Approx. 21,800
Miles of Sewer Main / Number of Lift Stations	185 miles / 13 lift stations
Average Age of Collection System	Approx. 60 years average
Average Dry Weather Flow / Peak Wet Weather Flow	8 mgd / 16 mgd
Treatment / Design Capacity	Richmond WWTP 9.0 mgd dry weather 16 mgd peak wet weather
RWQCB Region	Region 2 – San Francisco Bay
Orders	Order No. 2006-0003 – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. R2-2008-0003 NPDES Order No. R2-2008-0004 Cease and Desist Order No. R2-2007-0077 Mercury Discharge Regulations

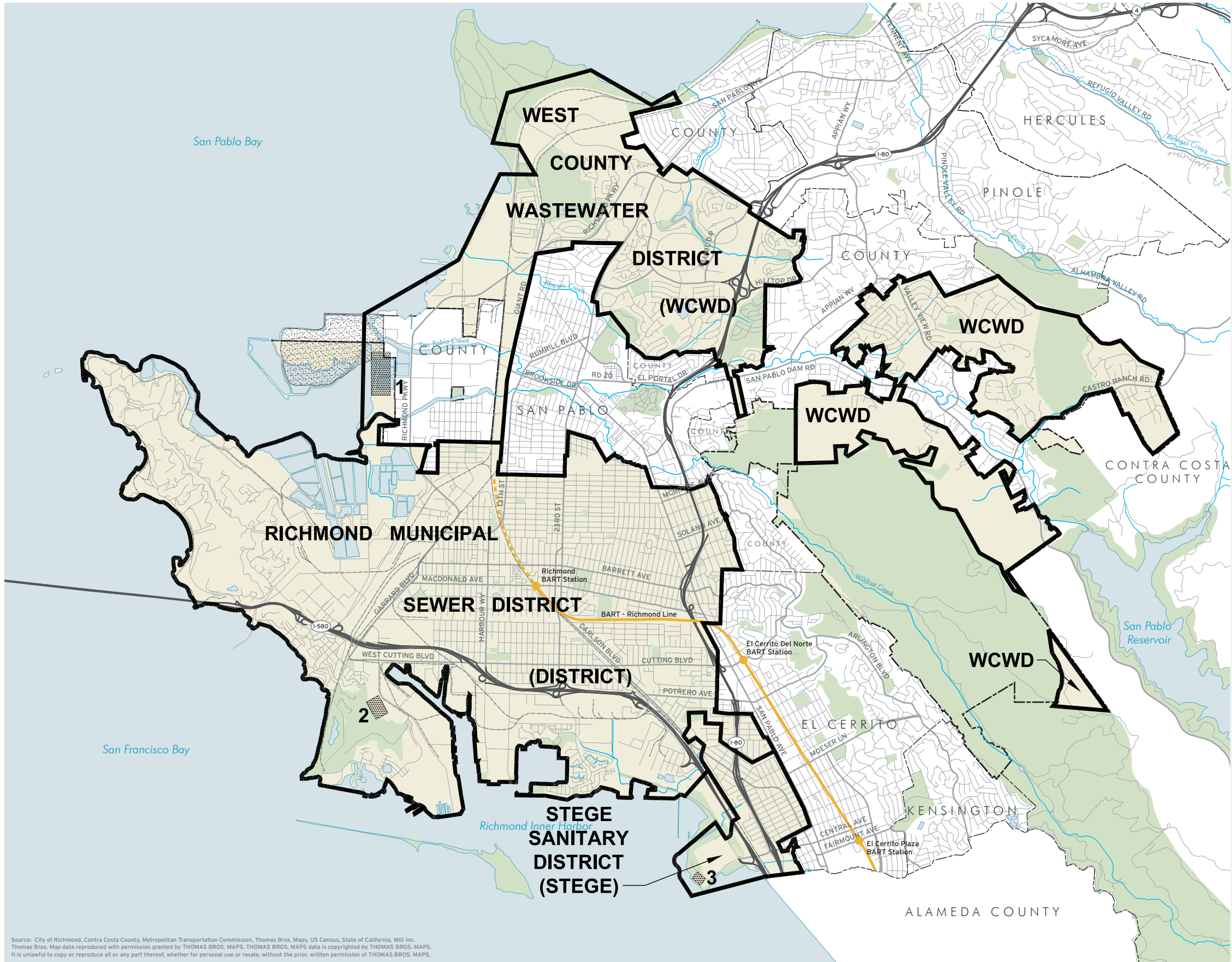



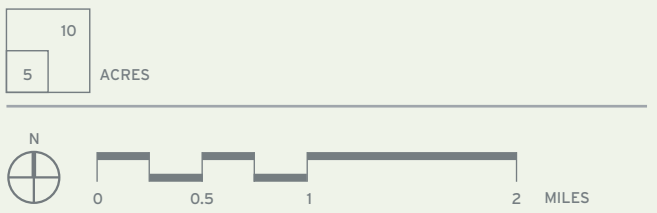


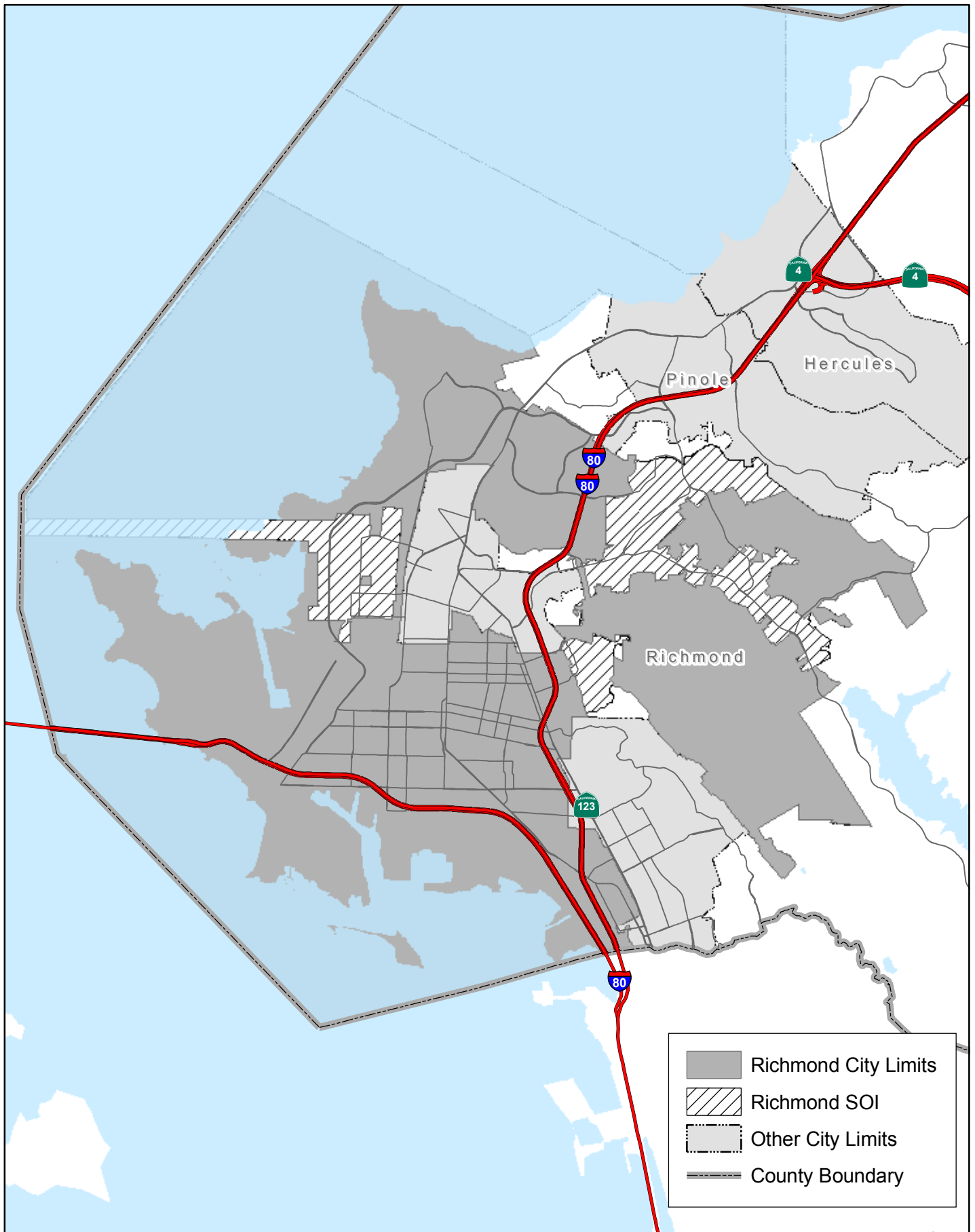
Figure 2.1
Sewer District Boundaries,
Treatment Plants, and Landfills

-  West Contra Costa Sanitary Landfill
-  TREATMENT PLANT
- 1** West County Wastewater District Treatment Plant
- 2** Richmond Municipal Sewer District Wastewater Treatment Plant
- 3** EBMUD Wet Weather Treatment Plant
-  District Boundaries



Source: City of Richmond, Contra Costa County, Metropolitan Transportation Commission, Thomas Bros. Maps, US Census, State of California, MIG Inc. Thomas Bros. Map data reproduced with permission granted by THOMAS BROS. MAPS. THOMAS BROS. MAPS data is copyrighted by THOMAS BROS. MAPS. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without the prior, written permission of THOMAS BROS. MAPS.

City of Richmond Boundary and Sphere of Influence



- Richmond City Limits
- Richmond SOI
- Other City Limits
- County Boundary



4.2 Growth and Population Projections

The City of Richmond has an estimated current population of 103,828 residents.¹ The Association of Bay Area Governments (ABAG) projects a population of 128,686 by 2020² with an average annual growth rate of just over one percent. The city is primarily residential at its core area, and along I-80, with both heavy, light industrial and commercial areas located near I-580. Richmond projects continued housing growth through the next decade along with growth in High Tech Business, Office and Industrial development.

The City expects to see a continuation of the renovation of older residential neighborhoods especially older multi-family structures built during the war years. Richmond anticipates a steady population growth of approximately one percent per year over the next decade. Furthermore, the City is projecting growth in construction of single family residences for the next decade. Land values are generally reasonable by Bay Area standards, and the City has adopted policies directed at home ownership.

4.3 Infrastructure Needs or Deficiencies

Richmond’s wastewater infrastructure consists of a collection and conveyance system with a wastewater treatment facility located on San Francisco Bay. Table 4.3 summarizes the City’s wastewater system facilities:

Table 4.3
City of Richmond
Wastewater System Overview

Facility	Quantity
Sewer Mains	185 miles
Lift Stations	13
Average Age of Collection System	Average 60 years
Average Dry Weather Flow / Peak Wet Weather Flow	8 mgd 16 mgd
Treatment /Disposal	City of Richmond WWTP deep water outfall at the Richmond WWTP

¹ California Department of Finance, Population Estimates for Cities, Counties and State, 2001-2007 (Table E-4)

² Association of Bay Area Governments, Projections 2007

4.3.1 Collection and Conveyance System

The City of Richmond provides sanitary sewer service to approximately 21,800 accounts, of which approximately 15,900 are single family residential, 2,400 multi-family residential and approximately 3,500 are commercial and industrial. The core sewer collection system within the City dates back over 100 years. The early collection systems utilized what were then state-of-the-art construction techniques and materials such as vitrified clay pipes, with what is now realized to be inadequate bedding. Portions of the City utilized earlier private sewer collection systems including use of wood sewer pipe laterals. As the City's industrial base grew in the 1920's, 30's and wartime 40's the wastewater collection system expanded along with the population. During the peak industrial years of the war, City population was greater than 100,000. Post WW II, a rapid downsizing of the wartime industrial capability resulted in several large industries and businesses closing their doors in Richmond, and city population decreasing to a low in 1960 of approximately 70,000 persons. City population and business activity remained somewhat level throughout the 1960's and 1970's. By 1985, new businesses and population began to revitalize the City. Even so, by the mid 1990's the City was faced with an aging sewer collection system with little or no money to fix or replace infrastructure.

In 1957 the City built its own sewer treatment plant, which has been upgraded and expanded its capacity several times since it was first opened with the last expansion taking place in 2004.

In June of 2002, the City contracted with Veolia Water North America (VNA) to operate the City's Wastewater Treatment Plant. The City in October 2004 entered into another contract with Veolia Water to maintain the City's sewer collection and conveyance system. These contracts remain in effect. Maintenance includes hydro-flushing and mechanical cleaning and inspecting for root intrusion, pipe integrity, and removal of foreign objects of the sewer mains. The City has also adopted a Sewer System Master Plan which details existing capacity and future needs, recommend system improvements, design criteria for future improvements, projects for the five-year Capital Improvement Program and annual maintenance activities.

Richmond is within the jurisdictional boundaries of the San Francisco Bay Regional Water Quality Control Board (RWQCB) – Region 2. In 2006, the State Water Resources Control Board adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-0003-DWQ) and Richmond must now report all sewer system overflows (SSOs) to the California Integrated Water Quality System (CIWQS). Between February 2007 and February 2008, the City had six reported SSO that exceeded 500 gallons.

The City is currently preparing a Sewer System Management Plan (SSMP) in accordance with the requirements of the SWRCB's General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ). This Plan would also include an Emergency SSO

Response Plan and the Pumping and Collection Systems Reliability and Management Plan. Emergency response personnel from the City's Public Works Department are on call 24 hours per day, 7 days per week.

The City has major issues with inflow and infiltration (I/I) due to the age of the collection system. Inflow is when surface water runoff enters into the sewer system, primarily from old and ill fitting manhole covers or vents. Infiltration is when ground water enters into the sewer collection system through cracked pipes or old deteriorated pipe joints. The City's wastewater collection system also has I/I problem during periods of high tidal activity with sea water infiltration into the sewer system.

Average age of the sewer collection and conveyance system is approximately 60 years with many areas much older. Approximately 60% of the sewer collection system was built before 1918. Much of the older collection and conveyance system is Vitrified Clay Pipe (VCP) which was generally in use until the mid-1970s. Design lifespan expectancy of VCP is approximately 100 years: and as described, much of the existing collection system is nearing the end of the expected lifespan. Another problem associated with the systems age is the size of many of the collection mains, at 6" diameter which are very susceptible to the effects of fats, oils and grease and the blockages they cause. Current standards require a minimum of an 8" diameter line. A combination of age, size of mains, a majority of the system designed to older standards, low budgets resulting from poor economic conditions (1946-1980's), have resulted in a number of raw sewage spills into streets, businesses, homes and into San Francisco Bay.

With increasing population and improving economic conditions in the 1990's the City was able to begin addressing some of the issues plaguing the collection system. In June of 2002, the City contracted with Veolia Water for professional services to operate and maintain the wastewater treatment plant. In October of 2004 the City expanded the contract with Veolia Water to also maintain and service the City's wastewater collection system. In 2006 the City adopted its Sewer System Master Plan. In the fall of 2006 the City was subject (along with Veolia Water NA, WCWD, and the JPA) of an environmental lawsuit filed by Baykeeper, over continuing raw sewage spills into the bay. The lawsuit was settled out of court in late 2006, with the settlement agreement requiring the City to spend \$20 million dollars over five years to repair, replace and improve the wastewater collection and treatment system in the City of Richmond.

In 2007, the City passed two bond measures tied to the improvement and rehabilitation of the system. The bonds provide close to \$50 million dollars to be used on projects identified in the Sewer System Master Plan and outlined in the Capital Improvement Plan (CIP). The City's five-year CIP (2008-2012) identifies the need for over \$44 million dollars to rehabilitate the collection system and modernize the treatment plant. These projects include replacement of old and broken sewer mains, upgrading of pipes, redesign and replace problem "hot spots" within the

system, manhole repair or replacement, tidal groundwater infiltration rehabilitation, a digester upgrade in the WWTP to meet Federal Regulations, construction of new aeration basins, clarifier improvements and upgrades, influent pump replacement and effluent water reuse projects. Many of the WWTP improvement will implement current technology to reduce energy use, improve efficiency and meet current water standards.

4.3.2 Treatment Facilities

The City of Richmond's Wastewater Treatment Plant is located at 601 Canal Boulevard in Richmond. It is operated and maintained via contract with Veolia Water North America, which has a 20 year contract with the City. The contract expires in 2022. Treatment capacity is 9.0 million gallons per day (mgd). The current average flow is approximately 8 mgd. The plant was originally constructed in 1957; the last major upgrade was in 2004 when the capacity was increased to the current 9.0 mgd.

4.3.3 Disposal Facilities

In 1977, WCWD, the City of Richmond, and the Richmond Municipal Sewer District entered into a joint powers agreement, the West County Agency (WCA), to construct and maintain effluent and sludge disposal facilities including a 5-mile pipeline, dechlorination processing, biosolids drying beds, laboratory facilities and the San Francisco Bay outfall. Treated wastewater from the WCWD WPCP that is conveyed to the Richmond WPCP is combined with the effluent from the Richmond plant, dechlorinated, and discharged through a combined 72-inch diameter deep-water outfall into central San Francisco Bay. Increasingly stringent water quality standards will require that WCWD and Richmond continue to implement improvements to their treatment processes and carry out preventive programs to avoid wastewater loading that requires additional treatment. In January 2008, the Regional Board adopted Order No. R2-2008-0004, a Revised Tentative Cease and Desist Order, with effluent limitations that will have to be met by 2016. The Order includes time schedules for compliance; capital improvements may not be necessary if compliance can be met through Best Management Practices and other efforts.

In addition to the deep water outfall, there are two shallow water outfalls to handle overflows, located at approximately the intersection Harbor Way South and Wright Avenue and the second structure located off of Boat Ramp Road.

4.3.4 Summary

The City of Richmond's provides wastewater collection and treatment for the older "core" area of the City, consisting of approximately 13.5 square miles of territory. Service infrastructure consists of an aging collection and conveyance system and the Wastewater Treatment Plant. The

City, in its five-year CIP, is investing approximately \$40 million dollars in system improvements, upgrades and repairs. The WCA owns and utilizes the deepwater outfall located at the City’s WWTP for discharge of treated effluent.

4.4 Financing Constraints and Opportunities

The City of Richmond’s sanitary sewer services are funded through service charges, and the City accounts for its wastewater utility through an enterprise fund. The City has signed a 20 year contract with Veolia Water North America for operation and management of the City’s Wastewater Treatment Plant and sewer collection system.

For FY 2006/2007, the City had total General Fund revenues of \$133,143,188 million and total expenses were \$131,643,187 million. For the same period sewer operating revenues were \$21,550,800 million and operating expenses were \$13,049,898 *Table 4.4* summarizes the financial history of the City of Richmond’s wastewater utility enterprise fund.

Table 4.4
City of Richmond – Wastewater
Wastewater Utility Fund Summary

	FY 2006/2007 Actual	FY 2007/2008 Actual	FY 2008/2009 Budgeted
Operating Revenues	\$ 21,550,800	\$ 7,556,575	\$14,938,729
Operating Expenses	\$ 13,049,898	\$ 13,826,798	\$14,690,859
Net Assets, End of Year	\$ 8,500,902	\$ 400,017	Not known awaiting end of Fiscal Year

The City’s wastewater utility has in the past been operating at a deficit due to insufficient revenues. In 2005, the City increased its wastewater service rates and has been able to establish an operating reserve for the Wastewater Utility for the first time in several years.

Richmond has long-term financial issues related to its aging sewer collection system. Years of economic stagnation during the decades of the 50’s – 80’s have left the system in poor repair, as the City has not had the funds to conduct regular maintenance and replacement of older lines. Much of the system predates the 1920’s, and is both under sized and reaching the projected end of its service life. Improving economic conditions during the 1990’s and a changing political climate within the City have begun bringing needed repairs and improvements to the system.

The City has taken several critical steps towards bringing the aging system up to modern standards, including increasing service fees to bring more funding into the wastewater / treatment budget. In 2002 and in 2004 the City signed a long term contracts with Veolia Water NA, which specializes in the operation and maintenance of sewage collection and treatment facilities. Veolia Water NA has begun identifying needed improvements, both to the physical facilities and infrastructure, but also in the management and operation of the system.

In 2006, a water quality lawsuit was filed against the City, Veolia, the WCWD and the JPA over frequent and under reported spills of raw sewage into both San Pablo and San Francisco Bays. The parties reached an out of court settlement in late 2006, which calls for the City to spend \$20 million over five years to improve the sanitary sewer system and provide upgrades to the wastewater treatment plant. Consequently, in 2007, the City was able to pass two revenue bond measures, totaling nearly \$50,000,000 for upgrades, repairs, replacement and long term maintenance to the City's wastewater system. These improvements, will save the City and rate payers money as the aging system will be restored and modernized to current operational standards. Fines for spills should also dissipate.

The City has planned for its capital needs through a five-year CIP and is implementing projects aggressively, expending approximately \$20,000,000 over five years on the collection and conveyance system, and approximately \$20,000,000 over five years on upgrades and improvements to the City owned wastewater treatment plant. Because of the bond measures, all wastewater projects in the five-year CIP are fully funded.

4.5 Cost Avoidance Opportunities

The City through the JPA, works with the WCWD to jointly utilize the City's deepwater outflow. The City of Richmond funds 68 percent of the cost to maintain and operate the deepwater outfall with WCWD paying 32 percent of the cost for its use of the facility.

The settlement agreement with Baykeeper may also amount to a cost avoidance opportunity in that the City was able to pass bond measures to pay for the improvements. The City will be able to upgrade and modernize the infrastructure which will reduce the long term maintenance and also avoid fines for sewer spills. Veolia Water NA's implementation of modernization improvements to the Wastewater Treatment Plant, will improve plant efficiency, meet newer EPA and State Water standards for quality, and will also be more energy efficient. These improvements will result in cost savings for the City and will extend the life of the wastewater infrastructure, reduce flows to the WWTP, and reduce the risk of sanitary sewer overflows and fines.

4.6 Opportunities for Rate Restructuring

As noted in *Section 4.4*, the City’s wastewater utility had been operating at a deficit due to a rate structure that did not provide adequate revenues to cover operating and capital costs. The City increased rates on July 1, 2005 based on a comprehensive rate study. Sewer user fees are collected by the Contra Costa County Assessor’s Office via the property tax rolls.

Richmond charges a monthly service charge of \$39.08 for single family residential accounts, and \$31.42 for multifamily residential. Commercial and industrial accounts are charged based on actual wastewater generation. The current service rates are summarized in *Table 4.5*.

Table 4.5
City of Richmond
2007 Wastewater Service Charge

Type	Rate
Single Family Residential	\$39.08/month (equates to \$469.00/year)
Commercial / Industrial	Based on wastewater loading Low base = \$261.00 per ccf

The City’s current sewer connection fee for a single family residential unit is \$2,556.00

4.7 Opportunities for Shared Facilities

The City of Richmond through agreement with the West County Wastewater District discharges treated effluent through the WCA’s Wastewater Treatment Plant’s deepwater outfall, located in Richmond. The secondary treated effluent from Richmond is mixed with chlorinated and treated effluent generated at the WCWD WWTP and discharged through the outfall structure into San Francisco Bay. Sludge from Richmond’s WWTP is also transported via force mains to WCWD WWTP in North Richmond for spreading and drying. The dried sludge is then trucked to the West Contra Costa County Sanitary landfill for disposal. Agreements are in place for storm water generated over capacity events at the Richmond WWTP, for the wastewater to be transported via mains to the East Bay Municipal Utility District’s Storm Water Treatment Facility located in south Richmond. The facility was built expressly for this purpose.

4.8 Evaluation of Management Efficiencies

Richmond’s wastewater utility is managed within the City’s Engineering Department. The City contracts with Veolia NA for professional services in the management and operation of the WWTP and collection/conveyance system. The City uses a five-year CIP, annual budget, a Sewer System Master Plan, and the General Plan to plan for wastewater services.

4.9 Government Structure Options

The City of Richmond’s wastewater collection and treatment system only services the central, older core of the City. Areas in north Richmond are provided service from West County Wastewater District. A small southern portion of the City is served by the Stege Sanitary District. Each of the service areas are geographically separate and are served by the agency best able to provide for the most efficient and cost effect service.

4.10 Local Accountability and Governance

The City of Richmond incorporated in 1905 and adopted a Charter in 1909. The City Council members are elected at-large and serve staggered four-year terms. The City’s sewer services are addressed by the City Council, which meets the first and third Tuesday of each month at 7:00 PM in regular session. Special sessions are scheduled for the fourth Tuesday. Council meetings are held at the City Hall, located at 1401 Marina Way South, Richmond. Meetings are noticed and posted per the provisions of the Brown Act, and are open and accessible to all members of the public. The Council Chambers and City Hall meet the provisions of the Americans with Disabilities Act (ADA) and are accessible to persons with all disabilities. The City Clerk posts notices of all meetings and agendas at least 72 hours in advance at City Hall and are available on the City’s website (www.ci.richmond.ca.us). The website includes information on the wastewater services the City provides, contact information, a problem hot line as well as financial information and rates.

The current City Council is identified in *Table 4.6*.

Table 4.6
Richmond City Council

Member	Title	Term Expires
Gayle McLaughlin	Mayor	November 2010
John E. Marquez	Vice Mayor	November 2008
Maria Viramontes	Councilmember	November 2010

Jim Rogers	Councilmember	November 2010
Nathaniel Bates	Councilmember	November 2008
Thomas K. Butt	Councilmember	November 2008
Tony K. Thurmond	Councilmember	November 2008
Harpreet S. Sandhu	Councilmember	November 2008
Ludmyrna Lopez	Councilmember	November 2010

Council members are compensated \$250 per month. As Board Members of the City’s Redevelopment Agency (RDA), council members are compensated an additional \$50 per month. Council members are eligible to receive medical, dental and life insurance benefits.

4.11 Sphere of Influence Recommendations

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that LAFCO review and update the spheres of influence (SOI) for each of the special districts and cities within the county at least once every five years in order to promote logical and orderly development of areas within the sphere.³ The SOI recommendations for the City of Richmond will be included in the West Contra Costa County Municipal Service Review that considers the full range of services the City provides. The City of Richmond has historically been the service provider for the wastewater services to the “core” areas of the City. The City has had numerous service issues including raw sewage spills, system failures and problems related to the age of the wastewater collection and conveyance system. The City is currently providing improved service and now has a fully funded Capital Improvement Plan with projects totaling over \$23,000,000 for the sewer collection and conveyance system and \$20,000,000 to be spent on the wastewater treatment facility. The City has considered future development and growth within its sewer service area.

4.12 Determinations

4.12.1 Growth and Population

Purpose: To evaluate service needs based upon existing and anticipated growth patterns and population projections.

The City of Richmond provides sewer collection, conveyance, treatment and disposal services for the central portion of the City’s incorporated area with an estimated population of 68,000. Overall the City of Richmond currently has an estimated population of 103,828 residents; this is expected to reach 128,686 by 2020 with an average annual growth rate of just over 1.0 percent.

³ Government Code Section 56425 et sq.

Richmond's growth with generally come through redevelopment, although there are still undeveloped parcels within the City's boundaries and Sphere. The City is also becoming a center for office and light industrial businesses as its location on the East Bay is very close and easily accessible to both Oakland and San Francisco. Given the current urban land uses and increasingly stringent water quality standards, there will be an increased need for comprehensive and modern wastewater services to serve existing and new customers within the City of Richmond. The City's aggressive implementation of capital improvements and preventive maintenance programs should ensure that adequate service levels are provided.

4.12.2 Infrastructure Needs or Deficiencies

Purpose: To evaluate the infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.

Richmond's wastewater infrastructure averages over 60 years of age, with 66% of mains undersized and are subject to frequent spills. The City is embarking on a massive Capital Improve Plan to upgrade sewer mains, manholes, fix problem hot spots, upgrade and update the wastewater treatment plant. Earmarked for these projects is approximately 40 million dollars. The City currently has within its wastewater system, approximately 185 linear miles of sewer mains, 13 lift stations and a WWTP rated at approximately 9 mgd treatment. Infiltration and inflow are critical issues being addressed through the CIP. For operation of the WWTP and maintenance on the wastewater collection and conveyance system, the City contracts with Veolia Water NA, a company which specializes in operation of wastewater treatment facilities and systems.

4.12.3 Financing Constraints and Opportunities

Purpose: To evaluate a jurisdiction's capacity to finance needed improvements and services.

Richmond operates its sewer utility as an enterprise activity, whereby the cost of services, including limited capital improvements and debt service, are recouped through service charges and fees. The City in 2007 passed two bond measures in 2007 for capital improvement projects totaling almost \$45,000,000. In 2002, the City signed an initial contract with Veolia Water NA for operation and maintenance of the Wastewater Treatment Plant. Later in 2004 the City again retained Veolia Water NA to maintain the City's wastewater collection system.

4.12.4 Cost Avoidance Opportunities

Purpose: To identify practices or opportunities that may help eliminate unnecessary costs.

The City is avoiding future costs for wastewater services by implementing an aggressive Capital Improvement Program funded by recently approved bond measures. Additionally, the City has

adopted a Sewer System Master Plan which addresses ongoing maintenance issues and operational improvements. These programs will extend the life of the wastewater infrastructure, reduce flows to the WWTP, and reduce the risk of sanitary sewer overflows and fines. The City as also entered into a contract for operation of the WWTP and sewer system with Veolia Water NA a company with extensive experience in the operation of wastewater systems worldwide.

The City will also avoid costs by reducing infiltration and inflow, which reduces the impact on treatment capacity and compliance with discharge requirements.

4.12.5 Opportunities for Rate Restructuring

Purpose: To identify opportunities to impact rates positively without decreasing service levels.

The City completed a rate study in 2004 and increased its wastewater rates in 2005. The rate increase has generated sufficient revenue to cover operational and debt service costs, and has allowed the City to recently establish operating reserves for the utility. Prior to this the utility was operating at a deficit.

4.12.6 Opportunities for Shared Facilities

Purpose: To evaluate the opportunities for a jurisdiction to share facilities and resources to develop more efficient service delivery systems.

The West County Agency (WCA) owns and operates a deepwater outfall facility located at the City's WWTP in Richmond. Agreements are in place for emergency storm water related sewer treatment events to be processed through the specialized facility located in south Richmond and owned by the East Bay Municipal Utilities District. The City of Richmond is served wastewater collection and treatment services by three agencies. The central core of the City is served by the City owned subsidiary Richmond Municipal Sewer District utility, north Richmond is served by WCWD and a small southern portion of the City is provided service from Stege Sanitary District. Each of the agencies provides service in a distinct geographical area with no overlap of service boundaries.

4.12.7 Evaluation of Management Efficiencies

Purpose: To evaluate management efficiencies of the jurisdiction.

Richmond's wastewater utility is managed within the City's Engineering Department and operated under contract by Veolia Water NA. The City utilizes a five-year CIP, annual budget, a Sewer System Master Plan and technical input from Veolia NA.

4.12.8 Government Structure Options

Purpose: To consider the advantages and disadvantages of various government structures to provide public services.

This MSR has not identified any potential government structure options for the City of Richmond in regard to the provision of wastewater collection, treatment and disposal services. The City owns the collection, conveyance, outfall and treatment facilities which are operated under contract with Veolia Water NA. The City is provided wastewater collection services from three wastewater agencies, each has established service area and there is no overlap of services. As each of the agencies provides service to a geographic area, where extension of services by that agency is both logical and cost effective, there are no recommended changes in government structure.

4.12.9 Local Accountability and Governance

Purpose: To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management process.

Sewer services provided are managed through the City's Engineering Department with public participation addressed by the City Council. The City Council meetings are open and accessible to the public. The City provides information on its wastewater services on its website. The City has improved its accountability and governance in relation to the sanitary sewer system especially from half a decade ago.