

CHAPTER 4

Growth-Inducement Potential and Secondary Effects of Growth

This chapter contains the following sections:

- 4.1 Approach to Analysis
- 4.2 Growth-Inducement Potential
- 4.3 Impacts and Mitigation Measures

4.1 Approach to Analysis

The California Environmental Quality Act (CEQA) Guidelines require that an environmental impact report (EIR) evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined as follows:

[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are [public works] projects which would remove obstacles to population growth.... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.¹

The environmental effects of induced growth from a project of this nature are secondary or indirect impacts. Growth can result in significant increased demand on community and public service infrastructure; increased traffic, noise, degradation of air and water quality; and conversion of agricultural land to urban uses.

Based on the CEQA definition above, assessing the growth-inducement potential of the Water Treatment and Transmission Improvements Program (WTTIP) involves answering the question: Will construction and/or operation of planned improvements proposed as part of the WTTIP remove an obstacle to growth and thus directly or indirectly support more economic or population growth or residential construction? Implementation of the WTTIP would provide additional water service capacity, which would in part assist in serving additional planned and predicted residential and business customers in the Walnut Creek/Lamorinda area; therefore, the program would be growth inducing by this definition. The proposed capacity improvements also address existing capacity deficiencies.

¹ CEQA Guidelines Section 15126.2(d).

A variety of factors influence new development or population growth in the Lamorinda/Walnut Creek area, including economic conditions of the region, adopted growth management policies in the affected communities, and the availability of adequate infrastructure (including public schools and roadways as well as water service and sewer service). Water service is one of the chief public services needed to support urban development, and a service capacity deficiency could constrain future development.

Growth inducement may constitute an adverse impact if the growth is inconsistent with the land use and growth management plans and policies of the affected communities. Local land use plans (e.g., general and specific plans) of the cities served by the project provide land use development patterns and set forth growth policies that allow for the orderly expansion of urban development supported by adequate public services, including water supply, roadway infrastructure, sewer service, and solid waste service. A project that would induce “disorderly growth” (growth that is inconsistent with local land use plans) could indirectly cause adverse environmental impacts, as well as impacts to other public services, that were not previously envisioned by local jurisdictions and evaluated in the CEQA review of their land use plans and development proposals. Consequently, the level of growth accommodated by implementation of the WTTIP is evaluated for consistency with future planned growth outlined in applicable plans and policies. Even planned growth can result in significant environmental effects, and the WTTIP could indirectly contribute to such impacts by removing an obstacle to the occurrence of this development.

This chapter compares the growth assumptions that underlie current water demand forecasts for the Lamorinda/Walnut Creek area with population forecasts of the Association of Bay Area Governments (ABAG) and local planning agencies, and discloses the impacts associated with forecasted growth.²

4.2 Growth-Inducement Potential

4.2.1 EBMUD Planning Context

Requirements for Coordination between Land Use and Water Supply Planning Agencies

To ensure the provision of water services to support planned development, state law requires close coordination and consultation between local land use and water supply planning agencies on issues pertaining to such planned development. Each city and county is required to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction (California Government Code Section 65300). The general plan is a statement of development policies and is required to include land use, circulation, housing, conservation, open space, noise, and safety elements. As specified in the Government Code, the land use element designates the

² Existing water treatment capacity serving EBMUD’s West of Hills service area—supplied by the Orinda, Sobrante, and Upper San Leandro WTPs—is sufficient to accommodate existing and future demand. The WTTIP projects at these WTPs involve upgrading existing infrastructure (the ozonation systems at Sobrante and Upper San Leandro), improving water quality, and improving backwash water processing, and are not intended to add additional capacity.

proposed general distribution, location, and extent of land uses and recommends population density and building intensity for the various districts and other territory covered by the plan. The conservation element is required to address the conservation, development, and utilization of natural resources, including water. The water section of the conservation element is required to be developed in coordination with any countywide water agency and with all districts and/or city agencies that develop, serve, control, or conserve water for the county or city for which the general plan is prepared. Coordination with the water agencies is required to include a discussion and evaluation of water supply and demand information contained in any applicable urban water management plan that has been submitted to the city or county by a water agency (California Government Code, Sections 65302 et seq.).

Urban Water Management Planning Act

Every urban water supplier is required to prepare an urban water management plan (UWMP) for the purpose of “actively pursu[ing] the efficient use of available supply” (California Water Code, Section 10610.2). In preparing the UWMP, the water supplier is required, to the extent practicable, to coordinate with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies. When a city or county proposes to adopt or substantially amend a general plan, the water agency is required to provide the planning agency with the current version of the adopted UWMP, the current version of the water agency’s capital improvement program or plan, and other specified information about the system’s sources of water supply. The Urban Water Management Planning Act requires urban water suppliers, as part of their long-range planning activities, to make every effort to ensure the appropriate level of reliability in their water service sufficient to meet the needs of their various categories of customers during normal, dry, and multiple dry water years (California Water Code, Section 10610 et seq.).

Water Supply Analysis Requirements (Senate Bills 221 and 610)

In 2001, the California legislature adopted two bills that also pertain to the need for coordination between land use and water supply planning and decision-making. Under amendments to the Subdivision Map Act³ contained in Senate Bill (SB) 221, an applicant for a subdivision of 500 or more dwelling units must demonstrate to local land use agencies, at the time the subdivision map is considered for approval, that sufficient water supply is available to support the proposed development. Proof of available supply is to be based on the written verification from the applicable public water system. Written verification must be supported by substantial evidence, which may include, but is not limited to, the public water system’s most recently adopted UWMP. Under amendments to the Urban Water Management Planning Act contained in SB 610,⁴ the CEQA review for most large projects must include an assessment of water supply. SB 610 applies to large residential, retail, office, industrial, and mixed-use projects, and specifies the size (in terms of area and/or number of units) of projects in each category to which the requirement applies.

³ SB 221 amended the Subdivision Map Act by adding Sections 66455.3 and 66473.7 to the California Government Code, and also amended Government Code Section 65867.5 and Business and Professions Code Section 11010.

⁴ SB 610 amended California Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Water Code Section 10657, and amended Public Resources Code Section 21151.9.

EBMUD Role in Water Supply and Land Use Planning

As a municipal utility district, the District does not have authority to make land use decisions within its service area. It cannot approve or deny development proposals; that is the responsibility of the land use planning agencies of the jurisdictions the District serves. However, as discussed above, the District is required by state law to make every effort to ensure the appropriate level of water service for the areas it serves. Because implementation of major water projects can take many years, planned facilities must be based on projected future demand rather than existing demand. Due to the time it takes to construct water system improvements needed to meet future demand, coupled with the expectation of a long service life, water agencies' planning documents typically have longer planning horizons than many of the general plans of the jurisdictions they serve. As described below, the District's water demand projections are based on the amount of development allowed under currently approved general plans and were developed in consultation with planning agencies of the jurisdictions served.

EBMUD Service Area

Figure 2-1 (in Chapter 2) shows the District's existing service area based on the most recent Ultimate Service Boundary (USB). WTTIP projects needed to meet future demand would serve Lafayette, Moraga, and Orinda (Lamorinda), western Walnut Creek, and adjacent unincorporated areas. As indicated in Chapter 2, improvements proposed under the WTTIP are sized to address existing capacity deficiencies as well as serve buildout in the Lamorinda/Walnut Creek area through the year 2030. Proposed facility improvements have not been sized to accommodate growth beyond the USB established by the District, or the District's sphere of influence established by the Contra Costa County Local Agency Formation Commission (LAFCO). The EBMUD Board of Directors has adopted policies to oppose annexation of territory outside the USB, based on the District's limited water supply and on the precedence of obligations to existing and future customers within the USB/sphere of influence.

Districtwide Update of Water Demand Projections

EBMUD's current water demand projections are based on the *Districtwide Update of Water Demand Projections* Study (Demand Study) (EBMUD and Montgomery Watson, 2000), which extends projections through 2030. The Demand Study projections are based on current and future land uses, rather than on population projections (which were the principal basis for previous demand projections in the 1993 *Water Supply Management Program*). To project future demand, the land-use-based approach utilizes geographic information system (GIS) technology, existing data on water demand for various land use categories, and future changes in land use categories based on adopted general and specific plans. This approach enables the District to develop demand projections for each pressure zone⁵ in the system. The methodology used by the District to develop these land-use-based projections is described below. Specific water demands projected

⁵ As described in Chapter 2, Project Description, a pressure zone is an area within a specified elevation range (e.g., 250 to 450 feet) where storage and distribution facilities are designed to deliver water at a pressure range suitable for customer use. EBMUD's service area is divided into 123 pressure zones, ranging in elevation from sea level to 1,450 feet.

for the pressure zones serving the Lamorinda/Walnut Creek area are discussed under “Project Area Demand Projections,” below.

Existing Demand and Development of Land Use Unit Demands

Projecting future water demands based on future land uses first entails determining existing land uses and the water demand associated with each land use category. To determine the location and type of each land use category for 1996 (the base year for the study) and future years, the District relied on the adopted general plans and specific plans of the cities and counties within the service area and consulted with city and county planners, who provided input on future growth data for general plans and the phasing of new growth (Johnson and Loux, 2004). Polygons for each land use category were digitized over a 1996 aerial photograph to create a GIS land use coverage for the District’s entire service area. Future land use categories based on the adopted general and specific plans were also created and stored in the land use database (EBMUD and Montgomery Watson, 2000). To determine existing water demand for each land use category, the digitized 1996 land use coverage was linked, using GIS technology, to the District’s metered water use database. The water used for each land use category was calculated by summing the actual demand for the taps within each polygon. The total actual demand for each land use polygon was then divided by the area of the polygon to calculate an average “land use unit demand” (LUD), expressed in units of gallons per day per acre (gpd/acre), for each land use category. Average LUDs were calculated separately for the District’s East of Hills and West of Hills areas, since the two areas have different climates and landscape requirements. Adjustments to normalize the data (e.g., to account for lower-than-normal water use in 1996 due to higher-than-usual precipitation that year, and lower use as a consequence of continued water savings following the 1988 to 1993 drought) and to factor in unaccounted-for water⁶ were applied to the base 1996 LUDs to calculate adjusted 1996 LUDs (EBMUD and Montgomery Watson, 2000). The Demand Study assumed an unaccounted-for water value of 10 percent of the normalized metered demand.⁷

Future Demand

Future demand was calculated by applying a future adjustment factor to the adjusted 1996 LUDs. If the existing land use is the same for future years, the adjustment factor reflected changing water usage due to infill development, lower vacancy rates in commercial buildings, and the replacement of low-density nonresidential buildings with higher density buildings, as allowable under current general plan designations. Infill development refers to the development of unused parcels within developed areas; it does not include development of vacant or open space land use categories, which is categorized as new development. New development occurs when the existing land use category changes in future years. The water demand for new development is calculated using the 1996 adjusted average LUD for the new land use designation with a factor applied for future adjustments. As with the land use categories that do not change in future years, the future adjustment factors for new development account for increased densities of certain residential and

⁶ Unaccounted-for water is the difference between the total water produced at the water treatment plants and the total water consumption billed; it includes leaks in the distribution system, water treatment plant process uses, meter errors, unmetered construction uses, firefighting, and hydrant flushing.

⁷ Average historical unaccounted-for water percentages range from approximately 7 to 8 percent; the Demand Study conservatively used the 10 percent value to ensure that facilities are sized to handle worst-case demands.

nonresidential buildings (EBMUD and Montgomery Watson, 2000). Therefore, due to new development and changes in land use categories according to approved general and specific plans, the size and shape of some polygons will change in future years.

Planned conservation programs and water recycling projects will offset a portion of total future demand; these projected savings from conservation and water recycling for each land use category were also factored in to determine the adjusted future demand. Adjustments to the LUDs for conservation reflect the conservation goals of the 1994 EBMUD *Water Conservation Master Plan*, which projected total conservation savings of 33 million gallons per day (mgd) in 2020. More recently, the projected 2030 demand used for the 2005 *Urban Water Management Plan* shows a slight adjustment in assumed conservation savings (to 35 mgd in 2020) (EBMUD, 2005a). Table 4-1 presents systemwide average-day demand⁸ within the USB, with adjustments for conservation and water recycling.

TABLE 4-1
DISTRICTWIDE PROJECTED AVERAGE-DAY DEMANDS (2005–2030)
ADJUSTED FOR CONSERVATION AND RECYCLING
(mgd^a)

	2005	2010	2015	2020	2025	2030	2005– 2030 Change (mgd)	Percent Change 2005– 2030
Customer Demand	241	258	267	277	279	281	40	16.6%
Adjusted for Conservation	-13	-21	-27	-35	-35	-35		
Adjusted for Recycled Water	-6	-12	-14	-14	-14	-14		
Planning Level of Demand	222	225	226	228	230	232	10	4.5%

^a mgd = million gallons per day.

SOURCE: EBMUD, 2005a.

Project Area Demand Projections

As noted above, the land-use-based approach used in the Demand Study allows the District to project future water demands for each pressure zone in the system. Subsequent to the Demand Study, Lamorinda/Walnut Creek demands were updated based on consultations with city planners about rates of buildout. Figure 2-3 in Chapter 2 shows the pressure zones serving the Lamorinda/Walnut Creek area. Table 4-2, below, lists the pressure zones, the elevation range of each zone, and the communities served by each zone. Project-level and program-level planning for the WTTIP has been undertaken for each pressure zone. Table 4-3 indicates current average-

⁸ Average-day demand, usually expressed in gallons per day, is the total annual demand (in million gallons) divided by 365 (days per year). In contrast, Chapter 2, Project Description, discusses the *maximum* daily demand that the WTTIP needs to address to ensure adequate service during peak demand periods. This chapter considers average demand, as it better reflects the scale of growth anticipated to be served by the proposed WTTIP than does maximum daily demand.

**TABLE 4-2
COMMUNITIES SERVED BY PRESSURE ZONES WITH WTTIP PROJECTS**

Pressure Zone	Elevation Served (feet above mean sea level)	Area Served^a
Leland	100–250	Parts of Alamo, Lafayette, Pleasant Hill, and most of Walnut Creek
Colorados	250–450	Parts of Contra Costa County, Lafayette, Moraga, Pleasant Hill, and Walnut Creek
Cherry	300–500	Lafayette
Reliez Valley	350–550	Lafayette
Brookwood	450–650	Parts of Contra Costa County, Lafayette, and Walnut Creek
Reliez	450–570	Contra Costa County
Knight	615–815	Parts of Contra Costa County and Lafayette
Echo Springs	650–850	Lafayette
Hink	790–990	Lafayette
Bryant	450–650	Parts of Lafayette, Moraga, Orinda, and Walnut Creek
Baseline	700–900	Parts of Lafayette, Moraga, and Orinda
Camino Sobrante	450–650	Orinda
Carter	650–850	Moraga
Crossroads	650–850	Orinda
Dos Osos	1,050–1,250	Orinda
Encinal	650–850	Orinda
Fay Hill	650–850	Parts of Lafayette and Moraga
Hill Mutual	575–775	Alamo
Holly	645–845	Parts of Alamo and Walnut Creek
Laguna	900–1,100	Orinda
Las Aromas	650–850	Parts of Lafayette and Orinda north of Highway 24 and east of Camino Pablo
Mulholland	900–1,100	Parts of Orinda and Moraga
Orchard	540–740	Orinda
Ridgewood	450–650	Alamo
Saturn	600–800	Lafayette
Valencia	550–665	Orinda
Valley View	850–1,050	Parts of Lafayette and Orinda north of Highway 24 and east of Camino Pablo
Via Farallon	500–700	Orinda
Westside	850–1,050	Orinda
White Oak	550–750	Orinda

NOTE: Base pressure zones are shown in **bold**; pressure zone cascades, which are pressure zones at higher elevations served through the base pressure zones at lower elevations, are shown in unbolded text.

^a Refer to Figure 2-3 in Chapter 2 for a map of these pressure zones.

SOURCE: EBMUD, 2003a, 2003b, 2004, and 2005b–2005f.

TABLE 4-3
PROJECTED WATER DEMANDS BY PRESSURE ZONE (2005–2030)^a

Pressure Zone	Projected Demand (mgd ^b)				2005–2030 Change (mgd ^b)	Percent Change 2005–2030
	2005	2010	2020	2030		
Leland	8.74	8.86	9.15	9.50	0.76	9%
Colorados	5.69	5.87	6.01	6.08	0.39	7%
<i>Included with Colorados</i>						
Brookwood					–	
Cherry					–	
Echo Springs					–	
Hink					–	
Knight					–	
Reliez					–	
Reliez Valley					–	
Bryant	7.20	7.44	7.93	8.42	1.22	17%
Baseline	1.83	1.88	1.87	1.89	0.06	3%
Baseline (Montanera Development)	0.15	0.15	0.15	0.15	0	0%
<i>Included with Baseline</i>						
Crossroads					–	
Mulholland					–	
Camino Sobrante	0.04	0.04	0.04	0.04	0.00	0%
Carter	0.31	0.35	0.36	0.36	0.05	16%
Dos Osos	0.03	0.05	0.05	0.06	0.03	100%
Encinal	0.08	0.08	0.08	0.08	0.00	0%
Fay Hill	0.56	0.60	0.60	0.61	0.05	9%
Hill Mutual	0.03	0.04	0.04	0.04	0.01	33%
Holly	0.06	0.53	0.57	0.58	0.52	867%
Laguna	0.06	0.07	0.07	0.07	0.01	17%
Laguna (Montanera Development)	0.14	0.14	0.14	0.14	0	0%
Las Aromas	1.21	1.26	1.27	1.28	0.07	6%
Orchard	0.13	0.13	0.13	0.13	0	0%
Ridgewood	0.01	0.01	0.01	0.01	0.00	0%
Saturn	0.02	0.02	0.02	0.02	0.00	0%
Valencia	0.07	0.07	0.07	0.07	0	0%
Valley View	0.36	0.38	0.37	0.38	0.02	6%
Via Farallon	0.02	0.02	0.02	0.02	0.00	0%
Westside	0.03	0.04	0.04	0.05	0.02	67%
Whiteoak	0.03	0.03	0.03	0.03	0.00	0%
TOTAL	26.80	28.06	29.02	30.01	3.21	12%

^a Demands have been adjusted for normalization, unmetered water, and conservation. Demand does not include reclamation.

^b mgd = million gallons per day.

SOURCE: EBMUD, 2003a, 2003b, 2004, and 2005b–2005f.

day demand projections from the EBMUD Pressure Zone Planning Program (PZPP) studies for the pressure zones serving the Lamorinda/Walnut Creek area (EBMUD, 2003a, 2003b, 2004, and 2005b–2005f).

Projected growth-related trends identified in the PZPP studies for the pressure zones serving the Lamorinda/Walnut Creek area, and the potential for using recycled water in the respective pressure zones, are summarized below. Pressure zones are grouped as presented in the PZPP studies.

Leland Pressure Zone

Most of the growth in the Leland Pressure Zone is expected to occur as infill development, with relatively minor increases in water demand projected (EBMUD, 2005b).

Recycled Water. The largest water users in the Leland Pressure Zone include the John Muir Hospital and numerous apartment complexes. These uses, in addition to several large irrigated park areas in the pressure zone, provide some limited opportunities for using recycled water. However, the District has not identified any recycled water projects in this pressure zone (EBMUD, 2005b).

Colorados Pressure Zone

Approximately 5,900 water customers are located in this pressure zone. More than 50 percent of the pressure zone is residential, approximately 33 percent is vacant and open space, and the remaining land is commercial, office, industrial, or other land use. By 2030, the area designated as residential is projected to increase from 50 percent to about 60 percent of the pressure zone area (EBMUD, 2005c).

Recycled Water. The Lamorinda Recycled Water Project, which is planned to serve a portion of the Colorados Pressure Zone, is currently on hold. The District has identified customers in the Diablo Vista Subzone and Tice Subzone for recycled water use in this pressure zone (EBMUD, 2005c).

Bryant Pressure Zone

The Bryant Pressure Zone is about 50 percent residential and 40 percent vacant or open space; the remainder is a mix of commercial and public uses. Several vacant areas throughout the pressure zone are projected to be developed as low-density housing (EBMUD, 2004).

Recycled Water. The Lamorinda Recycled Water Project planned to serve a portion of the pressure zone is currently on hold (EBMUD, 2004).

Baseline, White Oak, Orchard, Valencia, and Laguna Pressure Zones

These pressure zones are mostly residential. Several vacant areas throughout these pressure zones are expected to be developed as low-density housing. The proposed Montanera Development would add 245 new homes, a swim center, and sports fields (EBMUD, 2005d; City of Orinda, 2006).

Recycled Water. Because the predominant land uses in these pressure zones are residential and open space, there are no significant opportunities to use recycled water. A golf course originally planned to be included in the Montanera Development (which could have used recycled water) has been removed from the development plan (EBMUD, 2005d).

Encinal, Westside, and Dos Osos Pressure Zones

These pressure zones are expected to remain completely residential through 2030, with no significant increase in demand. As shown in Table 4-3, the increases in average-day demands in 2030 for the three pressure zones range from 0 (for Encinal) to 0.02 and 0.03 mgd for Westside and Dos Osos, respectively (EBMUD, 2005e). (Because existing demand for these zones is so small, the projected increases nevertheless represent a sizeable increase in percent demand—a 67 percent increase for the Westside Pressure Zone and a 100 percent increase for the Dos Osos Pressure Zone over 2005 demand.)

The PZPP study for the Encinal, Westside, and Dos Osos Pressure Zones also indicated the possibility of three new pressure zones: the Lomos Cantadas, Chaparral, and Vollmer Peak Pressure Zones. The new pressure zones would be located directly above the Dos Osos Pressure Zone and would serve elevations between 1,250 and 1,850 feet. Growth in these zones was expected to occur at an extremely slow rate, if at all. Because the likelihood is low that these pressure zones will be developed in the next 30 years, the PZPP study concluded that planning for these pressure zones was speculative and beyond the scope of the current planning study (EBMUD, 2005e).

Recycled Water. Because the predominant land uses in these pressure zones are residential and nonirrigated open space, there are no significant opportunities to use recycled water; in addition, recycled water is not easily available to these pressure zones (EBMUD, 2005e).

Fay Hill and Carter Pressure Zones

The Fay Hill and Carter Pressure Zones could serve several potential new development projects. In addition, water service was recently requested by seven customers in the vicinity that currently receive nonstandard water service. Two proposed development projects are the Palos Colorados, a 123-unit housing development with an 18-hole golf course, and Rancho Laguna, a 36-unit development. Recycled water is proposed to be used to water the Palos Colorados golf course. Development in the two pressure zones through the year 2030 is expected to continue to be residential, except for the golf course and St. Mary's College. In the Carter Pressure Zone, approximately five acres of vacant land were projected to change to low-density residential (0 to 2.9 dwelling units per acre) by 2005, and approximately 340 acres are projected to change from vacant land to low-density residential by 2010. In the Fay Hill Pressure Zone, approximately 430 acres of vacant land are projected to change to low-density residential, approximately one acre from vacant land to medium-density housing (3 to 3.9 dwelling units per acre), and approximately 190 acres from vacant land to irrigated parks (including parks, school yards, playfields, and large landscaped street medians) by 2010. In the area above the Carter Pressure Zone, at elevations above 850 feet, approximately 107 acres are projected to change from vacant land to very low-density residential (minimum five-acre lots) by 2010, resulting in upper zone

demand and possible creation of a new pressure zone. Because demand associated with these speculative developments was included to size future facilities, the facilities could be oversized if the development does not occur. The PZPP study for these pressure zones therefore recommended that storage tank and pumping plant sizes be reevaluated at the time of the upgrades (EBMUD, 2003a).

Recycled Water. Approximately 0.2 mgd of recycled water is projected to be used for the Palos Colorados golf course; construction and timing of the recycled water project depends on approval and timing of the proposed development. No recycled water supply is easily available for St. Mary's College, and the college would need the proper infrastructure in order to receive recycled water (EBMUD, 2003a).

Holly, Hill Mutual, Ridgewood, and Crest Pressure Zones

The land use in these three pressure zones is dominated by very low-density residential, which is typical for difficult terrain. Land use in these pressure zones is projected to remain completely residential through the year 2030. The Holly Pressure Zone is expected to experience the most substantial increase in demand. Approximately 428 acres of vacant land in this pressure zone is projected to change to low-density residential (1 to 2.9 dwelling units per acre) by 2010. Part of this land would be part of the Alamo Summit Development, which would include 37 single-family homes. The Hill Mutual and Ridgewood Pressure Zones are expected to remain low-density residential (EBMUD, 2003b).

Recycled Water. Existing and future land uses in these pressure zones are residential, and there are no large users. There are no significant opportunities to use recycled water in these pressure zones, nor is a recycled water supply easily available (EBMUD, 2003b).

Las Aromas and Valley View Pressure Zones

Demand for both the Las Aromas and Valley View Pressure Zones, which supply the Saturn, Via Farallon, and Camino Sobrante Regulated Pressure Zones, is expected to remain relatively stable through 2030 (see Table 4-3). No major future developments are planned in either the Las Aromas or Valley View Pressure Zones. At one time, three new pressure zones had been proposed to serve customers located above the current Las Aromas Pressure Zone. However, the land in this area is designated as open space and is expected to remain as such in the future (EBMUD, 2005f).

Recycled Water. Recycled water is not used in the Las Aromas cascade (Las Aromas, Camino Sobrante, and Via Farallon Pressure Zones), and there are no significant opportunities to use recycled water in the Los Aromas or Valley View Pressure Zones (or the other listed pressure zones, which are cascade pressure zones associated with Las Aromas and Valley View). Potential use of recycled water in these pressure zones has been studied, but to date has been considered impractical due to distance and elevational differences from the proposed pipelines as well as the lack of large irrigation users (EBMUD, 2005f).

4.2.2 Projections of Planning Agencies in the Project Area

ABAG Projections 2005

ABAG is the regional planning agency in the Bay Area and provides growth forecasts for the nine Bay Area counties; in the past, the District has used ABAG projections in the development of its water demand forecasts. This EIR reviews the population projections provided in *Projections 2005* (ABAG, 2004) for Lafayette, Moraga, Orinda, Walnut Creek, and unincorporated Contra Costa County as part of the assessment of District water demand projections. Because the District did not base the 2000 Demand Study on population forecasts, but rather on future approved land uses and land use densities, a direct comparison of the District's growth assumptions with the ABAG projections is not possible. However, comparing population growth projected for the planning period by ABAG with District water demand projections provides a means to consider the consistency of future water demands to be met by the WTTIP with ABAG assumptions about future growth in the Lamorinda/Walnut Creek area. Similarities or differences between the projected growth rates provide an indication of whether implementation of the WTTIP could indirectly result in more or less growth than anticipated by the regional planning agency.

ABAG provides projections for cities, limited to the area within jurisdictional boundaries (city limits), as well as projections for subregional areas that include the cities and their spheres of influence. Forecasts for unincorporated areas are also provided. The WTTIP projects to meet future demand would serve Lafayette, Moraga, Orinda, part of Walnut Creek, and adjacent areas of unincorporated Contra Costa County. Table 4-4 presents ABAG projections for 2005 and 2030 and the resultant percentage increase in population projected to occur between 2005 and 2030 for these cities and for the cities plus their spheres of influence. The increase in water demand projected by EBMUD for the pressure zones in the Lamorinda area (see Table 4-3) is also included for comparison purposes.

As shown in Table 4-4, the percent increase projected by EBMUD for water demand in the Bryant, Colorados, and Leland Pressure Zones (including their associated cascade pressure zones) is less than the percent increase in population projected by ABAG for the project area cities. The higher percent increase shown for the ABAG projections (approximately 15 percent, whether cities alone or subregional areas are considered, compared with EBMUD's 12 percent) is clearly influenced by Walnut Creek, which is larger than the other three cities combined and has a higher rate of growth than the other cities. Because only part of Walnut Creek (approximately two-thirds according to the Walnut Creek General Plan) is in the EBMUD service area, Walnut Creek would not be expected to have a commensurate influence on the District's projections.⁹ Table 4-4 shows the projections for unincorporated Contra Costa County for information purposes only.

Although ABAG and District projections diverge somewhat, a comparison of the forecasts indicates that the WTTIP would not serve growth in excess of that projected by ABAG.

⁹ Assuming two-thirds of the ABAG 2005 and 2030 projections for Walnut Creek results in a total change of 13.6 percent for cities within their jurisdictional boundaries, rather than the 14.6 percent shown in Table 4-4, and a change of 13.3 percent for cities including their spheres of influence rather than the 14.8 percent shown in Table 4-4. This estimate assumes a uniform growth rate over the entire area of the city.

**TABLE 4-4
ABAG POPULATION PROJECTIONS**

	2005	2030	Percent Change 2005–2030	Percent Change 2005–2030 EBMUD Water Demand Projections ^a
Cities – Jurisdictional boundaries				
Lafayette	24,100	26,100	8.3%	
Moraga	16,300	18,400	12.9%	
Orinda	17,700	19,100	7.9%	
Walnut Creek	65,200	77,700	19.2%	
Subtotal (Cities)	123,300	141,300	14.6%	
Unincorporated Contra Costa County	160,700	190,600	18.6%	
TOTAL (Cities and Unincorporated County)	284,000	331,900	16.9%	12%
Cities – Including Spheres of Influence				
Lafayette	25,500	27,600	8.2%	
Moraga	16,400	18,100	12.8%	
Orinda	17,700	19,100	7.9%	
Walnut Creek	80,200	95,000	18.5%	
Subtotal (Subregional Areas)	139,800	160,200	14.6%	
Unincorporated – Rural East Contra Costa County	17,600	20,400	15.9%	
Unincorporated – Remainder ^b	6,700	7,800	16.4%	
TOTAL (City Subregional Areas and Other Unincorporated)	164,100	188,400	14.8%	12%

^a Percent change of projected water demands, 2005 to 2030, is based on the PZPP studies (see Table 4-3); shown here for comparison purposes.

^b The "remainder" area is composed of unincorporated areas that are outside city spheres of influence or other specific ABAG subregional areas.

SOURCE: ABAG, 2004; EBMUD, 2003a, 2003b, 2004, and 2005b–2005f.

Local Planning Agency Projections

The information presented for local planning agencies is based on general plans and contacts with agency staff. As with the ABAG projections, a direct comparison of the District's assumed population growth with population projections contained in local general plans and related planning documents is not possible, because the District did not use population forecasts as the basis of the 2000 Demand Study (but instead used future land uses and land use densities). However, comparing annual average growth rates derived from the population projections with water demand projections provides a means to consider whether the projected water demands to be met by the WTTIP are consistent with growth projected and planned for in the adopted general plans of the affected jurisdictions. Similarities or differences between the projected growth rates provide an indication of whether implementation of the WTTIP could indirectly result in more or less growth than anticipated by local planning agencies.

Table 4-5 presents population projections for Lafayette, Moraga, Orinda, Walnut Creek, and unincorporated Contra Costa County from the adopted general plans of the respective jurisdictions. Differences between the datasets for each jurisdiction are noted in the table. In addition, ABAG jurisdictional projections for 2005 and 2030 are included for comparison purposes. Because the local jurisdictions have varying planning horizons (see table footnote b), the total projected change represented by the various projections cannot be directly compared for general consistency. Therefore, to provide a means of considering the general consistency of projections of jurisdictions having a variety of planning horizons, this table presents calculated annual average growth rates based on the respective projections. In actuality, neither population growth nor the growth in water demand is expected to occur at an average annual rate, and EBMUD planning does not assume an average annual growth rate.

**TABLE 4-5
ABAG AND CITY/COUNTY POPULATION PROJECTIONS**

Cities (jurisdictional boundaries)	ABAG Projections 2005 ^a			Local Planning Projections ^b	Average Annual Percent Growth ^c	EBMUD Water Demand Projections Average Annual Growth ^d
	2005	2030	Average Annual Percent Growth (2005–2030)			
Lafayette ^e	24,100	26,100	0.32%	29,700	0.42%	
Moraga ^f	16,300	18,400	0.49%	19,116	1.6%	
Orinda ^g	17,700	19,100	0.30%	18,115	0.45%	
Walnut Creek ^h	65,200	77,700	0.70%	77,314	0.76%	
Unincorporated Contra Costa County ⁱ	160,700	190,600	0.68%	1,128,800	0.87%	
TOTAL^j	284,000	331,900	0.63%	1,273,045	–	0.48%

^a ABAG projections for cities are for the area within jurisdictional boundaries (i.e., they do not include the cities' spheres of influence).

^b Local projections represent population projections made in general plans; projections are for the planning horizon of each plan. Orinda's population projection is for 2006; Moraga's is for 2010, Contra Costa County's is for 2020, and Lafayette's and Walnut Creek's are for 2025.

^c Average annual percent growth was calculated based on information presented in the planning documents for the respective jurisdictions.

^d Average annual percent change of projected water demands, 2005 to 2030, was calculated from the total projected increase of 12 percent (see Table 4-3) based on the PZPP studies, shown here for comparison purposes.

^e Lafayette General Plan projections are for the city and its sphere of influence, based on ABAG *Projections 2002*. The general plan land use element includes projections to 2025. Calculated annual average growth is based on the 2005 population of 27,300, from Table 3 of the land use element.

^f Local planning buildout for Moraga is the "estimated actual" development potential shown in Moraga General Plan Appendix C, Development Potential. The growth rate is based on a 2000 population of 16,290, per Appendix C, and 2010 as the forecast year, per the general plan EIR.

^g The Orinda General Plan Housing Element (City of Orinda, 2004a) does not specify a buildout population. The buildout population and average annual growth rate shown above are based on the number of housing units, household densities, and vacancy rates reported for 2000 by the U.S. Census Bureau and California Department of Finance, and ABAG household demand projections to June 2006. The household densities and vacancy rate were assumed to remain the same as reported for 2000. The buildout year is assumed in this analysis to be 2006 based on the timeframe of the housing action plan included in the housing element.

^h The average annual growth rate shown for Walnut Creek is based on the estimated population of 66,500 as of 2005 (California Department of Finance estimate cited in the general plan and general plan EIR) and the general plan EIR's estimated buildout population of 77,314 in 2025. (Note that the population of 66,500 is characterized as the 2005 population in the general plan EIR and Chapter 3 of the general plan, but as the 2004 population in Chapter 4 of the general plan; for purposes of calculating the annual average growth rate in this table, the year was assumed to be 2005.)

ⁱ Contra Costa County projections as presented in the general plan are for the entire county—including incorporated cities—based on ABAG *Projections 2002* for the year 2020.

^j Since the local and county general plans had different planning horizons, a total annual average was not calculated.

SOURCE: ABAG, 2004; City of Lafayette, 2002a; Town of Moraga, 2001, 2002a; City of Orinda, 2004a; City of Walnut Creek, 2005, 2006; Contra Costa County, 2005a; EBMUD 2003a, 2003b, 2004, and 2005b–2005f.

City of Lafayette

The Lafayette General Plan cites ABAG's *Projections 2002* for the city and its sphere of influence as the source for projections presented in the plan (City of Lafayette, 2002a). The discussion of population growth trends and projections notes that the rate of population increase has slowed in recent decades, because most of the buildable land in Lafayette was developed by 1980. The majority of remaining vacant or underdeveloped land is located in environmentally constrained areas characterized by steep hillsides, oak woodlands, and unstable soil conditions. The general plan designates such land as Rural Residential.

According to the general plan, most new single-family residential construction will occur on infill lots scattered throughout the city's existing residential neighborhoods and in mixed-use developments located in downtown Lafayette (City of Lafayette, 2002a). The land use element of the general plan includes a summary of vacant and underutilized parcels with the potential to accommodate a mix of commercial and residential uses. The summary identifies the potential to accommodate 380,000 square feet of additional commercial space (for a total of 2,680,000 square feet of commercial space at buildout) and 1,026 additional housing units (for a total of 10,868 units at buildout). The general plan discussion of this potential notes that this projected buildout is less than the maximum potential that would be allowed by zoning standards (e.g., height and yard requirements), because the projection takes into account development constraints such as undersized parcels, underutilized parcels, parking and open space standards, and topographic limitations.

As shown in Table 4-5, the average annual population growth rate, based on projections for the city and its sphere of influence provided in the general plan, is slightly higher than the jurisdictional projection shown for Lafayette in ABAG's *Projections 2005* (0.42 percent compared with 0.32 percent) (ABAG, 2004). (The average annual growth rate based on the ABAG projections for Lafayette and its sphere of influence in 2005 and 2030 [25,500 and 27,600, respectively] is also 0.32 percent.) Both ABAG and the general plan project stronger future growth than the city has experienced in the recent past. According to census figures for 1990 and 2000, Lafayette grew at an average annual rate of 0.23 percent during that period. More recently, according to California Department of Finance (DOF) estimates, the city's population declined slightly in 2003, 2004, and 2005, resulting in an overall average annual growth rate of 0.14 percent for the 2000–2005 period. The growth rate indicated in the general plan is close to the average annual rate of increased water demand calculated from District projections for the Lamorinda area. Based on this comparison, implementation of the WTTIP projects would not induce growth at a rate beyond that projected by the City of Lafayette.

The growth management chapter of the Lafayette General Plan includes policies that address transportation and circulation issues, the maintenance of infrastructure and provision of public services, coordination with other agencies to ensure adequacy of utility services, review of development projects for conformance with adopted performance standards, and other policies designed to ensure that the rate of growth in the city is adequately supported by infrastructure and does not diminish the community's quality of life.

Town of Moraga

According to Appendix C, Development Potential, of the Moraga General Plan (Town of Moraga, 2002a), the town's population in 2000 was 16,290. The appendix includes projections for the maximum additional population increase that could be accommodated under the 2002 general plan (an increase of 3,187) and an "estimated actual" increase (an increase of 2,826); these represent increases of 20 percent and 17 percent, respectively. The maximum increase represents the town's maximum development potential based on the general plan, and the "estimated actual" projection is based on Town of Moraga experience, which indicates that the level of development typically results in fewer units than the maximum possible after site-specific review and other considerations are taken into account. General plan land use policies call for the development of several specific plans involving residential, commercial, and/or recreational developments.

According to the general plan EIR, the forecast year for the plan is 2010. The projected increase under the "estimated actual" scenario of 2,826 in 2010 represents an average annual residential growth rate from 2000 to 2010 of 1.6 percent (see Table 4-5). This growth rate is substantially higher than both ABAG's estimate and recent growth trends for the town, as reflected in census figures and DOF estimates. According to census figures, Moraga grew at an average annual rate of 0.19 percent from 1990 to 2000. According to DOF estimates, the city's population declined slightly in 2004 and 2005, resulting in a net 0.33 percent decline in population for the 2000–2005 period and an average annual growth rate of -0.08 percent. The unusually high growth rate shown in Table 4-5 is based on the town's population estimate of development potential (and population at buildout) under the general plan and the identification of 2010 as the forecast year in the general plan EIR; the general plan itself does not state when buildout is assumed to occur, nor does the document showing development potential and the population at buildout (Appendix C of the general plan). Appendix C also provides, as a point of comparison, the buildout projection (units and population) from the previous (1990) general plan, which indicates less expected growth in the current (2002) plan. Buildout under the 2002 general plan is expected to result in 4 percent fewer units and 4 percent less population than had been projected under the previous plan. Given recent growth trends and the lowering of expected growth in the current general plan, it is unlikely that buildout under the current plan would actually occur by 2010. (Cities frequently do not reach buildout of a general plan within the plan's stated planning horizon.) It therefore seems likely that the ABAG projection provides a more realistic estimate of the annual rate at which Moraga will grow over the next couple decades. As the table shows, the growth rate indicated for the District's projected water demand is close to ABAG's estimated growth rate for the town. Considering either ABAG's or the town's projections, implementation of the WTTIP projects would not induce growth at a rate beyond that projected and planned for by the town.

The Moraga General Plan Growth Management Element includes policies to achieve the goal of maintaining performance standards for town facilities, services, and infrastructure.

City of Orinda

The Orinda General Plan Housing Element (City of Orinda, 2004a), citing U.S. Census Bureau and California DOF information, states that the city's population in 2000 was 17,599; there were

approximately 6,744 housing units, with a 2.59 percent vacancy rate, and the estimated household density was 2.67 persons per household. The 2004 housing element does not include population projections, nor does it project a buildout year; however, it presents housing-unit information that provides an indication of anticipated growth, at least for the near-term planning horizon of the housing element. In 2001, as part of its periodic assessment of housing need, ABAG estimated that Orinda would need to construct 221 additional housing units by mid-2006 in order to accommodate anticipated population growth. Assuming an existing housing stock of 6,744 units in 2000, the same household density as in 2000 (2.67 persons per household), and the same vacancy rate, the addition of 221 units by mid-2006 would increase the population to about 18,115; relative to the 2000 census population this represents an increase of approximately 516, or 2.9 percent, over six and a half years (an average annual increase of 0.45 percent) (see Table 4-5). This is a somewhat lower rate than the 5.7 percent increase in population from 1990 to 2000 (an average annual increase of 0.56 percent) reported in the 2004 housing element. According to the housing element, a survey of vacant parcels in 2000 indicated that 368 parcels in the city could accommodate approximately 646 additional dwelling units. Among planned developments for the city is the 245-unit Montanera project¹⁰ (also referred to in the housing element as Gateway Valley) (City of Orinda, 2004a). However, the housing element does not provide an estimated timeframe for construction of these additional units.

Both the ABAG and general plan projections indicate a slower growth rate than Orinda experienced during the 1990s. As discussed, Orinda grew at an average annual rate of 0.56 percent from 1990 to 2000. More recently, according to DOF estimates, the city's population declined slightly in 2003, 2004, and 2005, resulting in a net 0.08 percent decline in population for the 2000–2005 period and an average annual growth rate of -0.02 percent. The growth rate indicated in the general plan is close to the average annual rate of increased water demand calculated from District projections for the Lamorinda area. Based on this comparison, implementation of the WTTIP projects would not induce growth at a rate beyond that projected by the City of Orinda.

City of Walnut Creek

The District serves about two-thirds of Walnut Creek, including the western, central, and southern portions (City of Walnut Creek, 2002a). The *Walnut Creek General Plan Housing Element 2001–2006* projects a population of approximately 70,200 in 2020, citing ABAG projections.¹¹ This projected increase translates to an average annual growth rate of 0.43 percent, which is somewhat lower than Walnut Creek's 6.2 percent growth between 1990 and 2000 (equivalent to an average annual rate of about 0.6 percent). The projection is about 3 percent lower than the ABAG *Projections 2005* estimate of 72,000 for Walnut Creek in 2020 (ABAG, 2004).

¹⁰ Although the District's PZPP studies for the Laguna and Baseline Pressure Zones, in which this housing project is located, states that the development would add 260 housing units, according to the city's website the project (approved in November 2005) would have 245 housing units.

¹¹ The cited population and date of the housing element suggest that ABAG's *Projections 2000* was used (ABAG, 1999).

In April 2006, Walnut Creek adopted a new general plan (City of Walnut Creek, 2006). The new general plan does not include population projections per se, and incorporates the 2002 housing element by reference. However, under the new general plan, buildout is estimated to result in a population of 77,314 in 2025, according to the general plan EIR¹² (City of Walnut Creek, 2005). This projected population represents a 16 percent increase from the 2005 population of 66,500, which translates to an average annual growth rate of 0.76 percent for the 20-year period. This average annual rate is higher than both the city's 0.6 percent average annual growth for the 1990–2000 period and the 0.5 percent growth rate cited in the general plan for the period 2000–2004 (City of Walnut Creek, 2006). The projection is also about 3 percent higher than the ABAG *Projections 2005* forecast of 75,100 for Walnut Creek in 2025 (ABAG, 2004). The average annual population growth rate that would result from buildout of the Walnut Creek General Plan 2025 is substantially higher than the average annual increase in water demand calculated from District projections in the PZPP studies for the Lamorinda/Walnut Creek area (see Table 4-5).

To summarize, the general plan housing element (which is still current) projects a population of 70,200 in 2020, whereas the EIR for the 2006 general plan estimates a population of 77,314 by 2025 (the horizon year for the new general plan) based on permitted land uses and densities. The housing element's average annual growth rate of 0.43 percent is slightly lower than the rate of increased water demand calculated from the District's projections for the Lamorinda area, while the average annual growth rate based on the 2006 general plan is considerably higher. In either case, based on this comparison, implementation of the WTTIP would not induce growth at a rate beyond that projected and planned for by the City of Walnut Creek.

The growth management policies of Walnut Creek's General Plan 2025 include a program that limits new commercial development (with the exception of the Shadelands Business Park) to 75,000 square feet per year, metered in two-year periods, through 2015. This program continues the commercial component of a growth management program adopted in 1993. That program implemented the same limits on commercial development (i.e., 75,000 square feet per year, metered in two-year periods). The previous program had included a limit on residential development, as well. According to the housing element, the residential cap was not believed to have constrained development because, as of January 2002, 1,371 units remained in the residential allocation out of a total of 2,550 units allocated for residential development for the 12-year period (1993–2005). The growth management section of the 2006 general plan also has a cap on residential development with a policy that links the number of allowed new housing units to the Regional Housing Needs Determination allocation assigned to Walnut Creek. Affordable units and units produced through state-mandated density bonus regulations are exempt from the cap. The general plan also includes goals, policies, and actions to address countywide growth management requirements that were adopted with voter approval of Measure C (in 1988) and Measure J (in 2004; Measure J extends the provisions of Measure C to 2034). These measures require cooperation among cities and the county on transportation and growth issues that cross city boundaries (City of Walnut Creek, 2006).

¹² The projected population, identified in the general plan EIR, is based on an estimated existing population of 66,500 in January 2005, the potential for 5,342 new dwelling units to be added between 2005 and 2025, an assumed occupancy rate of 0.964, and an average household size of 2.10 persons per household.

In 2000, Walnut Creek had 31,425 dwelling units, which represents a 5 percent growth in housing stock between 1990 and 2000 (City of Walnut Creek, 2002a). From 2002 to May 2005, 683 multifamily units and 92 detached single-family houses had either been built, were under construction, or had been issued permits; 120 units of affordable housing had been initiated and approved, and another 800 multifamily units were under review.

Contra Costa County

The Contra Costa County General Plan, adopted in 1991, was republished with amendments in 1996, and again republished with amendments in 2005 (Contra Costa County, 1991, 1996, 2004, 2005a, 2005b). For many issues, including past population growth and future trends, the general plan considers the county in three sections: East County, Central County, and West County. The WTTIP is located in Central County, which had a population of 414,000 in 1990 and 471,800 in 2000; however, this part of the county extends far beyond the WTTIP project area. The Central County population is described as being primarily concentrated in large subdivided areas along Interstate 680 (I-680), Highway 24, and Highway 4. Regarding future growth in the Central County area, the general plan notes that, while residential growth had been very strong in the 1980s, many of the cities along the I-680 corridor are now reaching buildout as the last remaining lands are developed. The general plan cites the U.S. Census for the countywide population of 948,816 in 2000, and ABAG *Projections 2002* for a countywide population projection of 1,128,800 in 2020, an increase of 18.9 percent (Contra Costa County, 2005a). Considering that Central County is far larger than the unincorporated areas near Lamorinda and western Walnut Creek, it is likely that the demographic trends for any parts of the unincorporated county served by the WTTIP projects are better captured in the projections for cities including their spheres of influence (see Table 4-4, above).

Conclusions

The following conclusions are based on the analysis presented in the preceding sections:

- **The District projections are generally consistent with regional projections prepared by ABAG.** As indicated in Table 4-4, the growth trends reflected in *Projections 2005* population forecasts for Lafayette, Moraga, Orinda, and Walnut Creek combined are somewhat higher than the growth trend reflected in the PZPP studies for the pressure zones serving these cities. The water demand projections (even if they had been based primarily on population projections) would be expected to increase at a somewhat lower rate than would population alone, since the demand projections take into account the effects of conservation programs and the use of recycled water to reduce potable demands. In addition, because the District's demand projections are based on land use projections, they incorporate factors besides population, including differing use levels for different land use categories. For this reason, some differences between District and ABAG projections would be expected. The difference in ABAG and District projections is greater when ABAG's projected growth for unincorporated Contra Costa County is factored in. This discrepancy in part reflects the fact that the ABAG projections include all of the unincorporated county and all of Walnut Creek, while the PZPP studies focus more precisely on the specific areas served by EBMUD. As the comparison of growth projections indicates, the growth reflected in the District's PZPP studies is not greater than (and therefore would not induce growth beyond) the growth planned for by the regional planning agency in the service area.

- The differences between the District forecasts and those prepared by local land use agencies are insignificant for the purposes of this analysis.** As discussed in Section 4.2.1, above, under Districtwide Update of Water Demand Projections, the District based the demand projections on the changes of land use that could occur under approved land use plans in the service area. Because the District did not use specific population or housing projections, a direct comparison with these elements in local planning documents is not possible. However, the average rates of projected growth provide a general means for comparing assumed growth trends. As shown in Table 4-5 and discussed in the above section, some differences occur between local planning agency projections and those of ABAG and the annual average increase in water demand calculated from District projections. In the case of the most substantial divergence between local projections and those of ABAG and the WTTIP, the analysis indicates that the ABAG and WTTIP projections are generally consistent with growth trends in the area. Based on the comparisons discussed in this section, the demand increases for the WTTIP are generally consistent with growth anticipated in local planning documents. In addition, where some potential future projects are speculative, the District will reevaluate the need for specific projects prior to project implementation to ensure that facilities are not sized for capacity in excess of projected demand.

It is also important to consider that the District's land-use-based methodology for projecting demand relies on the approved planning documents of the respective jurisdictions. These planning documents determine the nature and intensity of land uses to be served by EBMUD and have already been subjected to environmental review under CEQA. In adopting the applicable general and specific plans, the local decision-making bodies have adopted measures to mitigate adverse impacts associated with the growth that will occur under the plans and have adopted statements of overriding considerations associated with impacts that cannot be reduced to an insignificant level.

4.3 Impacts and Mitigation Measures

Impact G-1: Secondary effects of planned growth.

Implementation of the WTTIP would support an amount of growth that is consistent with regional growth projections. Nonetheless, according to the CEQA Guidelines, the project could indirectly contribute to potentially significant secondary effects by removing a potential obstacle to projected development. Some of these secondary effects of planned growth have been identified in CEQA documents prepared by land use agencies as significant and unavoidable, while others have been identified as significant but mitigable. Significant unavoidable impacts that could occur as a result of planned growth include: loss of open space, traffic increases, degradation of air quality, and change in the visual character of the region.

The following city council resolutions and environmental documents for city and county general plans and general plan amendments were reviewed in order to identify the significant impacts associated with planned growth in the area:

- City of Lafayette: *City Council Resolution 2002-055 Certifying an Environmental Impact Report Prepared for the Lafayette General Plan Revision and Adopting Environmental*

Findings Pursuant to the California Environmental Quality Act, Statement of Overriding Considerations and a Mitigation Monitoring Program (City of Lafayette, 2002b).

- City of Orinda: *City of Orinda General Plan, Volume 2: Technical Supplement and Environmental Impact Report* (City of Orinda, 1987a); *Resolution No. 29-87 Certifying Completion, Review, and Consideration of the Final EIR for the Orinda General Plan* (City of Orinda, 1987b); *Resolution No. 64-04 Approving a Negative Declaration for the Revised Housing Element of the City of Orinda General Plan Pursuant to the California Environmental Quality Act* (City of Orinda, 2004b).
- City of Walnut Creek: *Walnut Creek General Plan 2025 Final Environmental Impact Report* (City of Walnut Creek, 2005); *Negative Declaration, Housing Element Update* (City of Walnut Creek, 2002b).
- Town of Moraga: *Moraga 2000 General Plan Update Final Environmental Impact Report* (Town of Moraga, 2001); *Resolution 21-2002 in the Matter of Town Council Action to Certify the Environmental Impact Report and Adopt the Moraga 2002 General Plan Update* (Town of Moraga, 2002b).
- Contra Costa County: *Findings Related to Certification of the Environmental Impact Report for the General Plan and Adoption of the General Plan* (Contra Costa County, 1991).

Copies of these documents are available for review at the respective city and county planning departments. Table I-1 in Appendix I summarizes the growth impacts identified in the EIRs for general plans for the Lamorinda/Walnut Creek area.

4.3.1 Mitigation Measures

As a utility district, EBMUD does not have the authority to make land use decisions or to approve growth. Land use planning decisions, including the authority to approve or deny development proposals, are the responsibility of the land use planning agencies of the jurisdictions served by EBMUD. As it has for previous major water supply programs, the District will continue to coordinate with other jurisdictions to assist in mitigating the impacts of growth. The Urban Water Management Planning Act (as amended by Senate Bill 610) and the Subdivision Map Act (as amended by Senate Bill 221) require coordination between land use planning and water supply planning agencies; these statutes will help ensure that sufficient water supply is available to meet the demand of planned development while also helping to ensure that water supply facilities are planned and designed to meet the demand of planned growth. General plans of the jurisdictions served by EBMUD guide the pattern and rate of growth of those jurisdictions and have been reviewed under CEQA. Measures have been adopted in conjunction with plan approval to mitigate the adverse impacts of planned growth. However, some impacts related to growth remain significant and unavoidable.

Measure G-1: The EBMUD Board of Directors will work with other jurisdictions in the Lamorinda/Walnut Creek area to assist in mitigating the impacts of growth by:

- Participating in efforts to improve regional planning in the Bay Area

- Encouraging local land use planning agencies to coordinate land use planning functions and the provision of utility services
- Encouraging cities and counties to adopt general plans and zoning ordinances that favor high-density development and urban in-filling (which tends to minimize per-capita water use and minimize the costs and environmental impacts of water delivery systems); to provide incentives for more housing near public transit; and to adopt ordinances that conserve open spaces, protect wildlife habitat, and conserve energy and water resources

Despite implementation of the measures identified to mitigate growth summarized in Table I-1 in Appendix I, some secondary effects identified in EIRs prepared by land use jurisdictions for general plans and general plan amendments would remain significant and unavoidable.

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