

5 Growth Inducement

5.1 Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(e) requires that any growth-inducing aspect of a project be discussed in an EIR. This discussion should include consideration of ways in which the project could directly or indirectly foster economic or population growth or construction of additional housing in the surrounding environment. According to this section, the evaluation of growth-inducing effects should also consider whether a project would:

- Remove obstacles to population growth (e.g., through the expansion of public services into an area that does not currently receive these services).
- Increase the population, which may tax existing community service facilities, requiring the construction of new facilities that could cause significant environmental effects.
- Encourage and facilitate other activities that could significantly affect the environment.

According to the CEQA Guidelines Section 15126.2(e), it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section also addresses the standard in CEQA Guidelines Appendix G relating to Population and Housing as to whether a project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

The analysis contained in this chapter assesses the growth-inducing effects due to potential changes in water supplies potentially resulting from the Proposed Project. To support this analysis, information is provided about the existing water service areas, water supply and demand projections, and population/growth forecasts from current Urban Water Management Plans (UWMP) prepared by local water agencies, as well as, regional population forecasts and information from local general plans. This information is provided for the City of Santa Cruz (City)¹ and also the four other water districts that may participate in future water transfers with the City as a result of the Proposed Project: Soquel Creek Water District (SqCWD), San Lorenzo Valley Water District (SLVWD), Scotts Valley Water District (SVWD) and Central Water District (CWD). The City is in the process of preparing the 2020 UWMP, which is expected to be completed in 2021. See Section 4.13, Utilities and Energy, for additional background on existing water service providers.

A summary of the comments received during the scoping period for this EIR is provided in Table 2-1 in Chapter 2, Introduction, and a complete list of comments is provided in Appendix A. Comments related to growth inducement were received from SqCWD, the Valley Women's Club of San Lorenzo Valley, and several members of the public. Issues identified in public comments related to potentially significant effects on the environment under CEQA, and issues raised by responsible and trustee agencies, are identified and addressed in this EIR.

¹ The City owns and operates a water system that diverts and serves water both within the City limits and outside of those limits. References to the City's water system, rights and supplies therefore refer to areas both inside and outside of the City limits.

5.2 Background on Water Supply and Demand

5.2.1 City of Santa Cruz

The areas served by the City include the City of Santa Cruz, a portion of the City of Capitola, and portions of unincorporated Santa Cruz County in Live Oak, Soquel, and along Graham Hill Road, as well as along the coast north of the City. The City's service on the coast north of the City consists of limited numbers of connections that primarily derive from the City's agreements with landowners along its water pipelines. As explained in Section 4.13, Utilities and Energy, the City's water supply is primarily from surface water sources with some groundwater production in the Santa Cruz Mid-County Groundwater Basin. Groundwater from this basin is used by the City, the SqCWD, and CWD, several small water systems, and numerous private rural water wells. The City stores water in Loch Lomond Reservoir to help meet dry-season water demand and as a back-up supply during winter storms when river diversions can be problematic due to turbidity issues.

The City follows a variety of policies, procedures and legal requirements in operating the City's water supply system, and the amount of water produced from each of the City surface water sources is controlled by different water rights and operational agreements. In general, the water supply system is managed to use available flowing sources to meet daily demands as much as possible. Groundwater and stored water from Loch Lomond Reservoir are used primarily in the summer and fall months when flows in the coast and river sources decline.

The City's adopted 2015 UWMP reported that annual water production had fluctuated from a high of nearly 3,800 million gallons per year (mgy) in 2006 to a low of approximately 2,500 mgy in 2015, which was during a time of drought and mandated water use restrictions (City of Santa Cruz 2016a). In 2018, water demand in the areas served by the City totaled approximately 2,650 mgy (M.Cubed 2019). The 2015 UWMP estimates a 20-year water demand projection at approximately 3,200 mgy in the year 2035 based on deliveries for average years, projected water demands, and available surface water flows consistent with ecosystem protection goals regarding fish habitat.

The City's primary water supply reliability issue relates to potential shortfalls during dry and critically dry years. The City's water supply is almost exclusively from local surface water sources whose yield varies from year to year depending on the amount of rainfall received. The City's water supply reliability issue is the result of having only a marginally adequate amount of storage to serve demand during dry and critically dry years when the system's Loch Lomond reservoir doesn't fill completely, and lack of storage makes the supply particularly vulnerable to multi-year droughts (see Chapter 3, Project Description, for further explanation).

The UWMP predicts that water demand projections will be met for 90 percent of all normal water years and that in those years existing and planned sources of water available to the City will meet the predicted service area total annual water demand of about 3,200 mgy. The UWMP's projections for the year 2035 show a shortfall of approximately 40 mgy during normal periods, 528 mgy during single dry year periods, and 1,250 to 1,639 mgy during multiple dry year periods. The City had not previously seen shortages in normal water years, but the UWMP identified potential reductions in water production for ecosystem protection (releases for fishery protection). However, operationally, the City predicts sufficient water supplies in normal years to meet demand even though a slight deficit seems to exist in the modelled projections (City of Santa Cruz 2016a). In single dry years, supplies are slightly inadequate to meet projected demand beyond 2020. In multiple dry years, available supplies fall substantially short of system demands. The one variable that represented the biggest unknown at the time the UWMP was prepared was the amount of water that would be required for flow releases for fishery ecosystem protection purposes (City of Santa Cruz 2016a). However, subsequent to adoption of the 2015 UWMP, the City finalized a negotiated long-term minimum bypass flow

requirements (Agreed Flows) with California Department of Fish and Wildlife (CDFW) and the National Marine Fisheries Service (NMFS) as part of the pending Anadromous Salmonid Habitat Conservation Plan (ASHCP) process (see Chapter 3, Project Description and Appendix C for additional information about the Agreed Flows).

The estimated approximate 1.2 billion gallon per year (or 1,200 mgy) shortfall during a multiple-dry-year period has been used for planning supplemental water supplies in the areas served by the City. The City has been pursuing possible new or supplemental water sources for the past several decades. The most recent strategies were developed as a result of a two-year Water Supply Advisory Committee (WSAC) process as explained in Section 3.2.1, Water Supply Planning Background, of this EIR. Four primary Water Supply Augmentation Strategy portfolio elements were identified that were subsequently included in the UWMP as follows:

- **Element 0: Additional water conservation** with a goal of achieving an additional 200 to 250 mgy of demand reduction by 2035 by expanding water conservation programs.
- **Element 1: Passive recharge of regional aquifers** by working to develop agreements for delivering surface water to the SqCWD and/or the SVWD² so they can rest their groundwater wells, help the aquifers recover, and potentially store water for use by the City in dry periods.
- **Element 2: Active recharge of regional aquifers** by using existing infrastructure and potential new infrastructure in the regionally shared Purisima aquifer in the Soquel-Aptos Basin (now referred to as the Santa Cruz Mid-County Groundwater Basin) and/or in the Santa Margarita/Lompico/Butano aquifers (now referred to as the Santa Margarita Groundwater Basin) in the Scotts Valley area to store water that can be available for use by the City in dry periods.
- **Element 3: A potable water supply using advanced-treated recycled water or desalination** as its source as a supplemental or replacement supply in the event the groundwater storage strategies described above prove insufficient to meet the goals of cost-effectiveness, timeliness or yield. In the event advanced-treated recycled water does not meet the City's needs, desalination would become Element 3.

The City has made progress in the pursuit of these strategies as summarized below. Implementation of the Proposed Project would support Elements 1 and 2.

- **Element 0:** An updated Water Conservation Master Plan was completed in 2016 to define the next generation of water conservation activities. The plan includes 35 implementation measures, many of which are already underway. The projected per capita water use in gallons per person per day (gpcd) is expected to decline to about 92 gpcd, far below the City's 2020 target of 110 gpcd, and continuing to decline to a level of about 78 gpcd by 2035 (City of Santa Cruz 2016a).
- **Element 1:** To date, the City and SqCWD have operated a pilot water transfer program that expired at the end of 2020, but was extended by the City and SqCWD in early 2021. The pilot program sends treated water from the City's Graham Hill Water Treatment Plant (GHWTP) to the SqCWD. Prior to implementing water transfers the two agencies worked collaboratively to assess the potential for any negative water quality consequences of introducing surface water into the SqCWD's water system and all studies indicated that the potential for either health or aesthetic issues was low (Dudek 2021). Pilot transfers³ were provided

² While WSAC recommendations considered only delivering surface water to SqCWD and SVWD, current planning considers delivering surface water to SLVWD and CWD as well.

³ Water transfers are reallocations of water between users through willing sellers and willing buyers; excess water would be sold by the City and purchased by a neighboring agency. Water exchanges are also reallocation of water between users through willing sellers and willing buyers; excess water would be provided or sold to a neighboring agency with agreement that water would be provided back to the City during dry periods or time of need. Water exchanges could occur either through future well extractions and/or through direct delivery via interties between neighboring agencies.

to a limited portion of the SqCWD service area during the 2018/2019 and 2019/2020 winter and spring wet season. During this time, active water quality monitoring and operational constraints analyses were conducted to help inform the feasibility of developing a larger and/or long-term project involving water transfers and exchanges.

- **Element 2:** An aquifer storage and recovery (ASR) study is underway that is looking at regional options for groundwater injection, storage and future extraction in order to actively recharge regional aquifers. A pilot ASR project is currently underway utilizing the City's existing Beltz wells, which will support the development of the Beltz ASR component of the Proposed Project.
- **Element 3:** Advanced treated recycled water or desalinated water would be developed as a supplemental or replacement supply in the event that the groundwater storage strategies described above prove insufficient to meet the City's goals of cost-effectiveness, timeliness and yield. A recycled water feasibility study was completed in June 2018, and a phase two recycled water study is being prepared to further develop alternatives for a comparative analysis with ASR and in-lieu projects. A desalination project feasibility update was completed in August 2018. In November of 2018, City Council accepted staff recommendations to prioritize recycled water over desalination, with the understanding that if the other alternative water supply augmentation strategies being considered are not able to meet the plan's goal, desalination would be reconsidered. Specifically, the City determined to continue to evaluate the opportunities and benefits of replacement and expansion of the City's existing tertiary treatment facility and to continue to evaluate treating wastewater to advanced treatment standards for potential groundwater replenishment and/or as surface water augmentation by sending such treated water to Loch Lomond Reservoir.

5.2.2 San Lorenzo Valley Water District

SLVWD serves several communities within the 136-square-mile San Lorenzo River watershed in the unincorporated San Lorenzo Valley. SLVWD owns, operates, and maintains three water systems that supply separate service areas from separate water sources, referred to as the North Service Area, the South Service Area, and the Felton Service Area. The North Service Area includes the unincorporated communities of Boulder Creek, Brookdale and Ben Lomond, and the South Service Area encompasses portions of the City of Scotts Valley and adjacent unincorporated areas. The Felton Service Area includes the town of Felton and adjacent areas. The SLVWD's currently active water supplies consist of nine active stream diversions, eight active groundwater wells, and one active spring.⁴ The SLVWD's groundwater wells draw from the overdrafted Santa Margarita Groundwater Basin. The SLVWD also has entitlement to a portion of the surface water storage in Loch Lomond Reservoir that has not been used to date.⁵

Water deliveries ranged from 1,781 afy in 2010 to 1,469 afy in 2015; projected total demand in the SLVWD's service areas is estimated at 1,795 afy (WSC 2016a). Based on the water supply and demand analysis provided in SLVWD's UWMP and with continued proactive management of its water resources, SLVWD's water supply is adequate to meet both current and projected water demands during average, single-dry-year, and multiple-dry-year conditions (WSC 2016a). The UWMP's finding that supplies would be adequate during multiple-dry-year conditions is based, however, on the assumption that continued local groundwater overdraft in the Santa Margarita Groundwater Basin is sustainable and that water can be supplied to the South System from the North System sources through the systems' existing interconnection (WSC 2016a).

⁴ SLVWD's diversions from tributaries to the San Lorenzo River under its water-right Permit No. 20123 are contingent on the existence of certain minimum stream flows existing below the City's Felton Diversion Dam through the September-May period.

⁵ SLVWD is entitled by agreement to purchase up to 313 acre-feet per year (102 million gallons per year) of Loch Lomond Reservoir water.

SLVWD and the County of Santa Cruz are developing a Conjunctive Use Plan for the San Lorenzo River Watershed to increase stream baseflow for fish and increase reliability of surface and groundwater supplies for the SLVWD. This project would interconnect SLVWD's three independent water systems to allow for increased reliability and allow the distribution systems to utilize surplus surface water from each other, providing in-lieu recharge to the groundwater aquifers through conjunctive use. Proposed project components identified to date that would allow for conjunctive use within the SLVWD's service areas and in cooperation with the SVWD include water rights changes, use of existing interties to move water between service areas, use of SLVWD's Loch Lomond Reservoir water rights and injection of excess surface water during wet periods and extraction of groundwater during dry periods in the Olympia well area⁶.

As a result of the CZU Lightning Complex Fire in August 2020, SLVWD facilities sustained significant facility and operational capacity losses according to a preliminary damage assessment prepared for SLVWD, which found more than 50% of the structures assessed were destroyed or severely damaged, while other facilities had heat damage, smoke, or possible contamination (SLVWD 2020). The water system's primary damage includes intakes and raw water pipelines (Peavine, Foreman, Clear Creek 1-3, Sweetwater); the Bennett Spring Overflow, tanks, piping and controls; and water storage (Lyon and Little Lyon tanks are contaminated with soot and other fire byproducts). The Big Steel Water Tanks and the Water Treatment Plant were spared from significant damage, but will require some minor repair before resuming full operation. SLVWD is currently working on emergency repairs to bring the water system back to functioning condition. At the time of the assessment in September 2020, service had been restored to all customers, although 419 customers were still affected by a Do Not Drink/Do Not Boil order (SLVWD 2020). The SLVWD watershed also sustained extensive damage during the fire, including destruction of trees and vegetation with indirect damage due to contamination of surface waters by ash and debris, increased erosion potential due to destruction of vegetation on slopes, and potential future damage caused by toppling of damaged trees. Surface waters within the fire zone have been contaminated directly by ash and debris (SLVWD 2020).

5.2.3 Scotts Valley Water District

SVWD provides potable and recycled water and serves most of the City of Scotts Valley and some unincorporated areas north of the City. The only source of potable water for the SVWD is groundwater from the overdrafted Santa Margarita Groundwater Basin. SVWD shares the basin with neighboring SLVWD and Mount Hermon Association, other small water systems, and over 1,100 private well users. No raw surface water is supplied to or by SVWD. Recycled water, supplied to SVWD by the City of Scotts Valley Water Reclamation Facility, is used primarily for landscape irrigation (Kennedy Jenks Consultants 2016).

Water demand is projected to increase from approximately 1,333 afy in 2015 to 1,635 afy in 2035 and 1,661 afy in 2040. Groundwater production had declined from 2002 through 2015 due to drought conditions, use of recycled water, and implementation of conservation programs (Kennedy/Jenks Consultants 2016). SVWD has adequate supplies available to meet projected demands should a multiple-dry-year period occur; however, overdraft of the Santa Margarita Groundwater Basin, especially in a time of drought, presents a concern for reliability over extended periods of time (Kennedy/Jenks Consultants 2016). See Section 4.8, Hydrology and Water Quality, for additional information on the Santa Margarita Groundwater Basin. Emergency intertie pipelines between SVWD and SLVWD can be used to transfer water during emergencies. These interties improve regional supply reliability by allowing SVWD access to SLVWD surface water source in an emergency (Kennedy/Jenks Consultants 2016).

⁶ The Olympia groundwater area is a hillslope area of partially exposed Santa Margarita Sandstone between the communities of Mount Hermon, Zayante, and Scotts Valley (WSC 2016a).

5.2.4 Soquel Creek Water District

The SqCWD provides potable water service and groundwater resource management within its service area that includes portions of the City of Capitola and unincorporated Santa Cruz County. SqCWD relies entirely on the overdrafted groundwater aquifers in the Santa Cruz Mid-County Groundwater Basin. SqCWD pumps groundwater from aquifers located within two geologic formations that underlie its service area. The Purisima Formation provides about 64% of SqCWD's annual average production for Capitola, Soquel, Seacliff Beach, and Aptos, and the Aromas Red Sands aquifer typically provides the remaining 36% of the annual average production for the communities of Seascapes, Rio Del Mar and La Selva Beach. Total water use includes water delivered to customers, water sold to other agencies, and non-revenue water and is expected to decline from an estimated 3,900 acre-feet per year (afy) in 2020 to 3,300 afy in 2045 (WSC 2016b).

Due to long-term over-production in the Santa Cruz Mid-County Groundwater Basin, its groundwater elevations are below protective levels. SqCWD established a pumping goal of 2,300 afy that must be met for at least 20 years to 2040 to eliminate the cumulative pumping deficit that has occurred and to restore the Basin. Once the Basin has been fully restored, pumping at the post-recovery goal of 3,300 afy set by the SqCWD Board of Directors can occur. To meet the targeted pumping goal, SqCWD has identified that approximately 1,500 afy of supplemental water source(s) would be required by the year 2025, decreasing to 1,100 afy by the year 2035, to meet the recovery pumping goals (WSC 2016b).

SqCWD has been actively pursuing supplemental supply options that would allow for reductions in groundwater pumping and facilitate basin recovery. In 2018, SqCWD approved the Pure Water Soquel Groundwater Replenishment and Seawater Intrusion Prevention Project (Pure Water Soquel), which uses advanced water purification to produce recycled water for replenishing the groundwater basin. The project is designed to produce 1.3 mgd or approximately 1,500 afy of purified water, which is the estimated volume required to offset the portion of the Santa Cruz Mid-County Groundwater Basin's groundwater overdraft attributable to SqCWD, as indicated above (ESA 2018). The facility is also being designed to enable future expansion if needed. The project is expected to be operational in 2022. Additionally, SqCWD is currently improving its existing groundwater well infrastructure and redistributing pumping inland through implementation of the Well Master Plan (WSC 2016b).

As indicated above, the SqCWD 2015 UWMP assumes that pumping will be limited to 2,300 afy when adequate supplemental supply is in use and that the SqCWD will pump at or below this level for at least 20 years to fully restore the basin. The volume of groundwater pumped in 2045 assumes that the groundwater basin has been fully restored and that pumping at the post-recovery pumping goal of 3,300 afy can occur. Once an adequate supplemental supply is available, SqCWD may utilize more of the supplemental supply sources in order to reduce the cumulative deficit recovery period, or to enhance basin conditions when faced with changing factors such as basin outflows, climate change, or other unforeseen factors even if the basin has been fully restored (WSC 2016b). Additionally, as previously indicated, the City and SqCWD implemented a pilot transfer program for the purpose of passively recharging the groundwater basin (see Section 5.2.1, City of Santa Cruz, for information about this pilot transfer program).

While SqCWD is generally 100% reliant on its groundwater supply, its distribution system includes interties with CWD and the City, as well as other local water supply systems. The three interties with the City include one bi-directional intertie allowing for limited water exchanges, and two uni-directional (to SqCWD) interties that provide SqCWD with greater reliability in the event of an emergency. Over the five-year period of 2011-2015, SqCWD received approximately 0.3 acre-feet of water from CWD and the City, and provided 6.09 acre-feet (approximately 2 million gallons [mg]) of water to the City (WSC 2016b).

5.2.5 Central Water District

CWD covers a service area of approximately 5 square miles east of the unincorporated area of Aptos, between the SqCWD and the City of Watsonville. With an estimated population of 2,700 to 3000, CWD produced 126.7 mg of water and customers consumed 123.3 mg in fiscal year 2017/2018.

CWD's water supply source is drawn exclusively from two groundwater aquifers in the overdrafted Santa Cruz Mid-County Groundwater Basin, the Purisima and the Aromas. CWD shares these two aquifers with other groundwater users and is a member of the Santa Cruz Mid-County Groundwater Agency. There are three wells that provide CWD's water supply and an additional three wells that are currently inactive (CWD 2020). Total production and associated groundwater pumping have declined since 2008 (CWD 2020). CWD has an adequate water supply and is addressing infrastructure repairs and upgrades through its capital improvement program (LAFCO 2017).

5.3 Population Growth and Development

5.3.1 Population Forecasts

Water service providers are responsible for providing services to accommodate growth in their service areas. The obligation of water service providers is demonstrated by the state Urban Water Management Planning Act (California Water Code Sections 10610 through 10657) and its requirement to prepare and adopt UWMPs. These UWMPs must be prepared and updated every five years and are required to estimate water supply needs for their service area in normal, dry, and drought years over a 20-year planning period. Water Code Section 10631 requires that an UWMP include current and projected population, and that the projected population estimates be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years. In other words, these suppliers are required to look at least 20 years into the future and to identify water sources that are or should be available within that time frame to meet estimated demand.

The Association of Monterey Bay Area Governments (AMBAG) prepares regional population, housing and employment projections approximately every five years for the counties of Monterey, San Benito, and Santa Cruz. Each forecast is produced with the best available data and is extensively reviewed by AMBAG's member agencies. Once completed, the forecast is used to provide data support for long-term regional planning documents and special districts' master plans, as well as to support city and county long-range planning. The City and other water districts have derived population projections for their respective service areas based on AMBAG projections. The most recent regional forecast was adopted by AMBAG in 2018, and AMBAG is in the process of preparing the 2022 regional forecasts. The 2022 Regional Growth Forecast was accepted for planning purposes by the AMBAG Board of Directors on November 18, 2020, and the 2022 Regional Growth Forecast is scheduled to be formally adopted by the AMBAG Board of Directors in June 2022. It is noted that the accepted forecast shows a slightly lower population growth than the adopted 2018 Forecast for all jurisdictions except the City of Capitola (AMBAG 2020).

Existing and projected population is summarized in Table 5-1. As shown in Table 5-1, existing population (per the California Department of Finance [DOF]) is less than the population forecast for the year 2020 (AMBAG) for all jurisdictions except for the unincorporated County of Santa Cruz, which has a slightly higher existing population than the AMBAG forecast for 2020. The 2015 UWMPs for the City, SqCWD, SLVWD and SVWD provide population projections for their service areas drawing from the AMBAG projections. These are summarized in Table 5-2.

Table 5-1. Existing and Projected Population Growth

Jurisdiction	Existing Population (AMBAG / DOF ¹)	Projected Population (AMBAG Projections)		
	2020	2030	2035	2040
City of Santa Cruz	68,381 / 64,424	75,571	79,027	82,266
City of Capitola	10,194 / 10,108	10,451	10,622	10,809
City of Scotts Valley	12,145 / 11,693	12,282	12,348	12,418
Unincorporated Santa Cruz County	136,891 / 137,740	139,105	140,356	141,645

Sources: AMBAG 2018; DOF 2020.

Notes: AMBAG = Association of Monterey Bay Area Governments; DOF = California Department of Finance.

¹ Existing population as of January 1, 2020 as reported by the California Department of Finance is shown in *italics* typeface.

Table 5-2. Population Projections in Urban Water Management Plans

Jurisdiction	2025	2030	2035
City 2015 UWMP			
City of Santa Cruz	70,058	73,375	76,692
County of Santa Cruz and City of Capitola	33,562	34,614	35,698
<i>Total</i>	103,620	107,989	112,390
SqCWD 2015 UWMP	41,938	43,481	45,315
SLVWD 2015 UWMP	22,776	23,293	23,688
SVWD 2015 UWMP	11,655	11,927	12,198

Sources: City of Santa Cruz 2016a; WSC 2016a, 2016b; Kennedy/Jenks Consultants 2016.

Notes: SLVWD = San Lorenzo Valley Water District; SqCWD = Soquel Creek Water District; SVWD = Scotts Valley Water District; UWMP = Urban Water Management Plan.

Due to its small number of service connections, CWD is not required to prepare an UWMP, and thus, is not included in Table 5-2. However, according to the CWD's Fiscal Year 2017/2018 Annual Report, no significant population growth is expected in the next 5 to 10 years. It is also noted that a recent service review of SLVWD indicates that it currently provides water service to a population of 19,900, and slow growth is projected to occur in the unincorporated County area for the next twenty years (LAFCO 2020). Local Agency Formation Commission (LAFCO) staff estimates that the entire population in the SLVWD service areas will reach 21,000 by 2040, which is slightly below current projections.

5.3.2 Land Use and Development Regulations

In providing water services, water agencies are responding to growth and development that are ultimately managed and approved by city and county land use policies. Various local, regional, and national forces and conditions influence growth rates and development patterns. The location and intensity of development that occurs in a specific area is controlled primarily by local governments through state-mandated general plans and zoning regulations. Cities and counties in California are required to prepare, adopt, and maintain a comprehensive, long-term general plan for the physical development of the county or city, and of any relevant land outside its boundaries (California Government Code Section 65300). The general plan is a city's or county's official land use policy document that guides its future character, form, and quality of development. In addition, the general plan establishes location and density/intensity of land uses. The state has mandated temporary housing reforms effective between

January 1, 2020 and January 1, 2025 that may permit additional housing to be developed within defined urbanized areas subject to a city's or county's general plan (California Government Code Section 66300). A city's or county's zoning code and other ordinances implement the general plan to regulate the intensity, density, and manner of development for all land uses. The amount of development contemplated by a general plan, as reflected in its land use and housing elements, among others, also must reflect a city's or county's "fair share" of projected housing demand, as reflected in a Regional Housing Needs Allocation (RHNA) formulated by the relevant "council of governments" (e.g., AMBAG) with input from the State Department of Housing and Community Development.

The cities of Santa Cruz, Capitola, and Scotts Valley and the County of Santa Cruz are the land use regulatory jurisdictions in the project area. The areas served by the City's water system include areas within the City limits and portions of Capitola and unincorporated County areas, and the SqCWD's service area includes portions of Capitola as well as primarily unincorporated County areas. The SVWD boundaries include most of the City of Scotts Valley as well as some unincorporated County areas north of the City. SLVWD's service areas encompass primarily unincorporated County areas, but also a small portion of the City of Scotts Valley. The service area of CWD is entirely within unincorporated County areas. The service areas of existing water agencies in relation to Proposed Project components are shown on Figure 3-4 in Chapter 3, Project Description. All of these jurisdictions have adopted general plans (with separate housing elements), local coastal plans, zoning, and other regulations that guide development; and in the case of the County, help to manage growth. The cities of Santa Cruz, Capitola, and Scotts Valley and the County of Santa Cruz have current housing elements, each of which sets forth goals and objectives for housing production, rehabilitation, and conservation to address their required RHNA established by AMBAG. Pursuant to state law, housing elements are updated every eight years. The housing elements also identify available sites or locations for housing to be built and describe programs to facilitate new housing opportunities. AMBAG has also developed housing unit projections for each jurisdiction as part of its regional population projections developed in 2018, which extend through the year 2040.

Various ordinances contained in the County Code also dictate how growth and development occurs in the unincorporated County area. In particular, Measure J was passed in 1978 by County voters to manage growth in the County. The passage of this measure resulted in the development of Title 17, Community Development, of the County Code, which establishes the County's Growth Management Ordinance. This ordinance sets policies that govern future growth and development in the County, and specifically regulates the character, location, amount, and timing of future development. The ordinance includes: (1) the establishment of urban and rural boundaries (Chapter 17.02); (2) the program for developing the annual population growth goal (Chapter 17.04); and (3) affordable housing requirements and incentives (Chapters 17.10 and 17.12). The Rural Services Line and an Urban Services Line set forth in the County Code (Chapter 17.02) define areas that are or have the potential to be urban, and areas that are and should remain rural. The establishment of these distinct boundaries serves to encourage new development to locate in urban areas, and to protect agricultural land and natural resources in the rural areas. In general, the areas within the Urban Services Line are served by public water systems and sanitary sewer facilities and receive an urban level of fire protection. In unincorporated County, the majority of the areas within the City's and SqCWD's water service areas fall within the Urban Services Line.

The establishment of the annual population growth goal (Chapter 17.04) is intended to limit population growth during that year to an amount determined to represent the County's fair share of statewide population growth. Each year's population growth goal is determined to assist and encourage the production of a number of housing units equal to, on the average, but not less than 15 percent of the newly constructed units during any 3 consecutive years for purchase or rent by persons with average or below-average incomes. The County Board of Supervisors adopted a Year 2020 population growth rate of 0.5%, which translates to 255 residential building permit

allocations. Including unused allocations from 2019, projected to total 197, an estimated total of 452 housing unit allocations would be available in 2020 (County of Santa Cruz 2019).

5.4 Growth Inducement Analysis

This section examines potential direct and indirect growth-inducing effects of the Proposed Project. The Proposed Project consists of the following primary components:

- Water rights modifications, including modifications related to place of use (POU), method of diversion, points of diversion and re-diversion, underground storage and purpose of use, extension of time and stream bypass requirements for fish habitat (referred to in this EIR as Agreed Flows).
- Water supply augmentation components, including ASR (new ASR facilities at unidentified locations and Beltz ASR facilities at the existing Beltz well facilities), and water transfers and exchanges and associated intertie improvements.
- Surface water diversion improvements, including the Felton Diversion fish passage improvements and the Tait Diversion and Coast Pump Station improvements.

5.4.1 Potential Direct Growth-Inducing Impacts

The Proposed Project would not involve construction of new residential or commercial development and, therefore, would not directly foster or induce population growth or economic expansion or growth. It is estimated that the Proposed Project may require the addition of approximately three new employees, one for the Agreed Flows implementation and two for the new ASR facilities maintenance, as described in Chapter 3, Project Description. Given the maintenance nature of these jobs, it is expected that these new employees would be drawn from the local area and likely would not require recruitment from outside of the area. The Proposed Project would not result in a substantial number of new permanent employees that would in turn induce population growth from outside the region that would induce construction of new housing. Even if it is conservatively assumed that the three new staff would relocate from outside the area, the population increase from three new households of approximately 8 residents⁷ is nominal and would be well within regional population growth forecasts. Thus, the Proposed Project would not foster population growth as a result of creation of new jobs.

5.4.2 Potential Indirect Growth-Inducing Impacts

This section analyzes whether the Proposed Project components would indirectly result in growth by removing an obstacle to growth (e.g., through expansion of public services into an area that does not currently receive these services) or by providing an expanded water supply that could indirectly induce population growth. CEQA Guidelines Section 15126.2(d) indicates that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. Per CEQA Guidelines Appendix G, the growth-inducing potential of a project could be significant if the project induces substantial unplanned growth or a concentration of population in excess of what is assumed in appropriate general plans or in projections made by regional planning agencies such as AMBAG. Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth beyond the levels currently planned by local or regional plans and policies.

⁷ Based on the City average household size of 2.45 persons per household.

5.4.2.1 Removal of Obstacles to Growth and/or Expansion of Service Area

The primary purpose of the Proposed Project is to improve flexibility in operation of the City's water system while enhancing stream flows for local anadromous fisheries. The City is a municipal utility that provides water service to an approximate 20-square-mile area, unincorporated areas of the County, a small part of Capitola, and coastal agricultural lands north of the City. The Proposed Project would not expand or change the areas served by the City and would not lead to introduction of service into areas that are not currently served. It is noted that, in general, any proposed changes to the areas served by the City are subject to separate approval by both the City Council and the Santa Cruz LAFCO. In addition, existing publicly owned open space lands to the west and north provides a natural geographic limit to the City's water service area. Within most of the areas served by the City, there are no existing obstacles to population, housing or economic growth linked to the availability of water in the areas served by the City other than the long-standing City prohibition against new water connections along the North Coast and growth limitations imposed by the County of Santa Cruz in unincorporated areas, neither of which would be changed as a result of the Proposed Project.

Similarly, the potential water transfers between the City and other water districts would not result in a change to the service area boundaries of these districts. There are no known obstacles to growth in the other water districts linked to the availability of water in these districts. While water supply is constrained due to overdrafted groundwater conditions in the SqCWD and CWD service areas, construction of a supplemental water supply, Pure Water Soquel, is currently underway to provide a water supply other than groundwater to help restore sustainable groundwater levels. In addition, as indicated above, growth limitations imposed by the County of Santa Cruz in unincorporated areas limit growth rates and annual building permits in unincorporated areas.

Therefore, the Proposed Project would not result in expansion of service or remove obstacles to growth.

5.4.2.2 Indirect Impacts due to Changes/Increase in Water Supply

Summary of Potential Changes in Water Supply

As indicated above, the Proposed Project includes three components: water rights modifications, water supply augmentation, and surface water diversion improvements. Hydrological and water supply models were run to identify water supply production with the Proposed Project, including the Agreed Flows. The results are summarized in Table 5-3 and details and methods used in the modeling are provided in Appendix D. Overall, the Proposed Project could result in an increase in water supply production of an average of approximately 96 mg in all years and 514 mg in critically dry years over existing conditions; however, the total supply with the Proposed Project would be equal to the City's projected service area demand of 3,200 mg that is forecasted in the City's 2015 UWMP. This increase in water supply production is consistent with one of the primary objectives of the Proposed Project, which is to support the implementation of the City's Water Supply Augmentation Strategy to deliver a safe, adequate reliable and environmentally sustainable water supply (see Chapter 3, Project Description). This change in water supply production with the Proposed Project would occur within the areas served by the City, except that water transfers and new ASR facilities could occur in other areas and in association with the other water districts. Potential indirect growth-inducing impacts within the areas served by the City and other water district service areas is assessed below.

Table 5-3. City Water Supply with Proposed Project

Water Supply	2018 Baseline (mg)	Proposed Project (mg) ¹
Average of All Years		
Treated Surface Water from Graham Hill Water Treatment Plant	2,977	3,589
• Minus Water Injected into Underground Storage Via ASR	NA	-233
• Minus Water Transferred to Other Suppliers	NA	-424 ²
<i>Total Treated Surface Water to City Customers</i>	<i>2,977</i>	<i>2,932</i>
<i>Total Beltz Groundwater Extraction to City Customers</i>	<i>127</i>	<i>92</i>
<i>Total ASR Extraction to City Customers</i>	<i>NA</i>	<i>176</i>
Total Supply	3,104	3,200
Average of Critically Dry Years		
Treated Surface Water from Graham Hill Water Treatment Plant	2,501	2,673
• Minus Water Injected into Underground Storage Via ASR	NA	-132 ³
• Minus Water Transferred to Other Suppliers	NA	-25 ^{2, 3}
<i>Total Surface Water to City Customers</i>	<i>2,501</i>	<i>2,516</i>
<i>Total Beltz Groundwater Extraction to City Customers</i>	<i>185</i>	<i>166</i>
<i>Total ASR Extraction to City Customers</i>	<i>NA</i>	<i>518</i>
Total Supply	2,686	3,200

Source: Gary Fiske and Associates 2021b.

Notes: mg = million gallons.

- ¹ A negative number is presented for ASR injections given that injection volumes are not available until they are extracted. Likewise, water transfers to other agencies are also shown as negative numbers given that those volumes are transferred and not available to the City.
- ² The maximum volume of water for water transfers provided above is based on the hydrologic and water supply modeling conducted for the Proposed Project (Appendix D). However, this chapter uses the existing infrastructure capacities of the existing systems as the basis for the proposed maximum volume of water that could be transferred due to the Proposed Project. That number (440 mg) is slightly larger than the maximum volume of water presented above.
- ³ ASR injections and water transfers may take place during what turns out to be critically dry or dry years given that critically dry or dry conditions may not be determined until a portion of the water year has elapsed. For example, rains in October and November could provide the conditions where the City would inject and/or transfer water while subsequent months of reduced rainfalls, indicating a critically dry or dry water year, may cause the City to cease these operations.

The Proposed Project's water supply augmentation components include the ASR programmatic component within the Santa Cruz Mid-County Groundwater Basin inside or outside the areas served by the City, and in the Santa Margarita Groundwater Basin outside the areas served by the City. Installation and operation of these facilities would be enabled by the Proposed Project's expansion of the POU of the City's appropriative water rights. The City would not be able to implement and operate ASR facilities under its post-1914 water-right licenses and permits without the State Water Resources Control Board (SWRCB) approving underground storage supplements to those licenses and permits. ASR would include new ASR facilities at unidentified locations and Beltz ASR facilities at the existing Beltz well facilities. Overall, ASR is a programmatic component of the Proposed Project; however, as a subcomponent of ASR, Beltz ASR facilities is a project component of the Proposed Project. The Beltz ASR project component involves the installation of upgrades to the existing Beltz system at the existing Beltz 8, 9, 10, and 12 facilities to allow for injection of treated water from the City's GHWTP and subsequent recovery (extraction) for use in the areas served by the City.

The estimated ASR annual injection and future potential extraction yields of ASR with the Proposed Project are shown in Table 5-3 and have been assumed in the hydrological and water supply modeling results summarized in Table 5-4. The ASR infrastructure capacity is designed to meet the agreed-upon worst-year gap of 1.2 billion gallons per year. The City's modeling assumes that there is sufficient groundwater storage capacity in either the Santa Cruz

Mid-County Groundwater Basin, or the Santa Margarita Groundwater Basin, to support ASR injections and extractions indicated in Table 5-4. At this time, however, only the locations of the Beltz ASR facilities are known. Table 5-4 therefore indicates that the City's analysis of the full Proposed Project assumes the "Total Aquifer Storage and Recovery" capacities, with the portions of those capacities described as "TBD" being associated with programmatic new ASR facility locations. Actual capacity and operational characteristics for new ASR facilities and Beltz ASR facilities would be based on completion of the ASR pilot programs, design-level groundwater modeling, and the ASR design process.

Table 5-4. Proposed Aquifer Storage and Recovery Capacity and Estimated Operation

	Proposed Capacity (mgd)		Estimated Operation (mg)			
	Injection	Extraction	Average		Maximum	
			Injection	Extraction	Injection	Extraction
Total Aquifer Storage and Recovery (ASR)	4.5	8.0	233	176	702	1,064
New ASR Facilities at Unidentified Locations	TBD	TBD	TBD	TBD	TBD	TBD
Beltz ASR Facilities at Existing Beltz Well Facilities	2.10	2.17 ¹	188	137	358	315

Source: Gary Fiske and Associates 2021a, 2021b.

Notes: mgd = million gallons per day; mgy = million gallons per year; TBD = to be determined.

¹ Based on the physical limitations of the Beltz well facilities, the maximum extraction capacity at Beltz 8, 9, 10, and 12 is 3.27 mgd. Given that the existing groundwater system at these facilities extracts 1.1 mgd, 2.17 mgd of the total capacity is available for the proposed ASR facilities at these Beltz facilities.

Potential Indirect Growth Inducement Within Areas Served by the City

The underlying purpose of the Proposed Project is to improve flexibility in operation of the City's water system while enhancing stream flows for local anadromous fisheries. The City has negotiated Agreed Flows with CDFW and NMFS, which are long-term minimum bypass flow⁸ requirements to better protect federally listed Central California Coast coho salmon and Central California Coast steelhead in all watersheds from which the City diverts water. The Agreed Flows would be incorporated into both pre-1914 rights on the North Coast streams and post-1914 permits and licenses on the San Lorenzo River and Newell Creek to improve instream habitat and flow conditions for these fish species. Incorporating the Agreed Flows into all City water rights would further constrain the City's surface water supply that currently is limited primarily in single dry years and multiple dry-year periods. Consequently, the City needs to improve operational flexibility of the water system within existing rights, permits, and licenses to allow better use of limited water resources. To do this, the City is proposing water rights modifications to the existing rights, permits, and licenses to expand the authorized POU; to better utilize existing diversions by, among other things, incorporating groundwater storage; and to extend the City's time to put water within the scope of the City's Felton water-right permits to full beneficial use. This would enable the City to implement or partially implement Elements 1 and 2 of its adopted 2015 UWMP to provide adequate supplies to meet demand projections in its service area under normal, dry and multiple-dry years, as acknowledged in the project objectives for the Proposed Project (see Chapter 3, Project Description).

⁸ A bypass flow refers to requirements that water that would otherwise be diverted instead be bypassed from the diversion and left in the stream.

The Proposed Project would expand the POUs of the City's pre-1914 and post-1914 appropriative water rights to include the areas served by the City, two local groundwater basins, and the service areas of neighboring water agencies, as shown on Figure 3-3 in Chapter 3, Project Description. The Proposed Project would also change the stated method of diversion to explicitly allow direct diversion under the existing Newell Creek License and Felton Permits. This change would explicitly authorize longstanding operations by the City under that license and those permits by explicitly authorizing direct diversion to the GHWTP. Another modification would provide an extension of time in which the City could make full beneficial use of 3,000 afy diversion under its Felton Permits to the year 2043. While the City has been diligently using water from the Felton Diversion for beneficial use, to date, the City has used just over half the permitted amount on an annual basis, due largely to extensive water conservation efforts within the City. In the future, even with continued conservation, with the implementation of the Agreed Flows the City expects to need the full entitlement. The Proposed Project also would authorize ASR at the Beltz wells through the addition of underground storage supplements to the Tait Licenses and the Felton Permits.

These modifications would not change the total limits on the volume of water that could be diverted under existing water rights. They would, however, allow flexibility to directly divert water to the GHWTP and potential storage of water through ASR to provide more reliability and flexibility of use of existing water sources as a result of the incorporation of Agreed Flows for fishery protection. None of the Proposed Project components represent a new source of water. ASR, which is proposed in part to help protect groundwater sources in the overdrafted Mid-County Groundwater Basin and/or Santa Margarita Groundwater Basin and in part to provide the City with supply during dry periods, would provide enhanced storage of water available under the City's existing rights. The proposed surface water diversion improvements at the Felton Diversion and the Tait Diversion are primarily for fish passage improvements and would not affect water supply that could lead to indirect population growth. The improvements at the Tait Diversion include an increase in the capacity of the existing pump station in order to support diversions that would result from the proposed water rights modifications, but these improvements would not increase the authorized amount of diversions under the City's appropriative water rights. The Felton Diversion improvements would not increase capacity of the diversion.

The results of the hydrological and water supply modeling as summarized in Table 5-3 show a slight increase of 96 mgy in available supply that would occur on average in all years. This would cover a potential normal year water deficit as identified in the current 2015 UWMP. Similarly, the modeling results for a critically dry year show that the water supply deficit projected in the 2015 UWMP (528 mgy) would be generally met under the Proposed Project with approximately 514 mgy of water potentially provided. In either case, the combined effects of the Proposed Project components would bring total water supply levels to the projected 3,200 mgy identified in the UWMP as needed to meet existing and projected water demand. Thus, the proposed water rights modifications and ASR facilities would provide needed supplemental water supplies during times of identified water supply shortfalls.

While the demand projections are associated with growth already anticipated in the areas served by the City, the Proposed Project would provide for planned population growth as set forth in the 2015 UWMP. Although water service agencies are responsible for accommodating and serving projected growth, an increase in service capacity beyond that needed to serve planned growth may cause or otherwise influence growth by removing development constraints. A project that would induce substantial unplanned population growth, either directly or indirectly would be considered a potentially significant impact under the CEQA Guidelines Appendix G. Population projections included in the City's 2015 UWMP are lower than current AMBAG regional population forecasts for the City in the years 2030 and 2035 as shown on Table 5-1 and Table 5-2. The potential annual increases of water supply availability as a result of the Proposed Project would not exceed regional projections or indirectly induce substantial unplanned growth, because the water demand estimated in the City's adopted UWMP and used for water supply modeling for the Proposed Project is consistent with and does not exceed AMBAG projections and planned growth.

Therefore, the Proposed Project would result in a less-than-significant impact related to potential inducement of unplanned population growth based on regional population projections. Furthermore, the City's 2015 UWMP forecasts a continued reduction in water demand despite population growth due to implementation of planned water conservation strategies (City of Santa Cruz 2016).

The level of planned population growth identified in the City's 2015 UWMP that would be supported by the Proposed Project also is consistent with local general plans. The City's 2015 UWMP water demand projections are based on updated models of actual and forecast use, taking into account information on water usage and effects of conservation, water rates, and other factors expected to impact the demand for water, as well as AMBAG population and housing projections and water demand estimates developed for the University of California, Santa Cruz (UCSC) facilities. The water demand modeling report included as part of the City's 2015 UWMP identifies an increase of approximately 1,150 residential units in the City between 2020 and 2030, which is less than approximately 1,410+ potential residential units that could be constructed within the City under the existing General Plan as identified in the City's General Plan Housing Element (City of Santa Cruz 2016b). The City's 2015 UWMP also forecasts an increase of approximately 700 residential units in the City's service area outside of City limits, although this is not further segregated by unincorporated County or City of Capitola areas. However, the County of Santa Cruz and Capitola Housing Elements to the General Plan indicate that approximately 4,295 and 152 residential units, respectively, could be constructed under existing General Plans for these areas (Santa Cruz County 2016, Capitola 2015). The County projection is for urban and mixed-use developments in which the portion of the unincorporated area in the City's service area is located. Therefore, as a general indicator of consistency with local general plans, the City's 2015 UWMP projections for residential units are less than what could potentially be developed under existing general plans, and the Proposed Project would result in a less-than-significant impact related to potential inducement of unplanned population growth based on general plan growth projections. It is also noted that the current water demand projection for the UCSC for the year 2040 is approximately 20 mgd less than the 308 mgd forecast for UCSC in the City's 2015 UWMP based on water demand projections for the currently proposed 2021 Long Range Development Plan (LRDP) (UCSC 2021). Further, the land use plans, regulations, and development decisions are controlled by the City, Capitola, Scotts Valley, and County of Santa Cruz in their respective service areas, and, as previously indicated, the County's growth management regulations require adoption of an annual growth rate in the unincorporated areas with a specified number of residential building permits that can be issued in most of the project area.

5.4.2.3 Potential Indirect Growth Inducement Within Service Areas of Other Water Districts

The Proposed Project with modification of the City's appropriative water rights would facilitate the opportunity for potential future water transfers and exchanges with neighboring water agencies, including SVWD, SLVWD, SqCWD, and CWD. When water is available and conditions of future agreements are met, these transfers include a range of water volumes of approximately 98 mgd to 277 mgd (0.5 to 1.5 mgd from November 1–April 30) has been identified that could potentially be transferred by the City to SqCWD and/or CWD via an upgraded intertie with some yet unknown volume of water potentially returned or exchanged to the City during dry periods. Additionally, up to approximately 163 mgd (0.9 mgd from November 1–April 30) of water could be transferred by the City to SVWD and/or SLVWD via future intertie facilities with some volume of water potentially returned to or exchanged with the City during dry periods. The amount of water that may be returned through exchanges is unknown at this time. The Santa Cruz Mid-County Groundwater Basin GSP indicates that if water transfers benefit groundwater levels, and are sustainable over time, and the Basin's performance consistently reaches sustainability targets, then the City potentially could recover some of the increase in groundwater in storage as a supplemental supply during dry periods. The conditions of such

transfers and exchanges would be established in future agreements between the City and one or more of the neighboring water agencies, if such a project or projects are pursued. Additional environmental analysis would be required before such transfers could proceed.

The priority water supply augmentation strategy set forth by the WSAC and included in the City's 2015 UWMP recommended developing and implementing conjunctive use⁹ of surface and groundwater resources in mid and northern Santa Cruz County. A significant barrier to implementing more conjunctive use of the City's San Lorenzo River sources of supply is the current limitations on the POU's in the City's Tait Licenses and Felton Permits, which are post-1914 appropriative water rights. In particular, the SqCWD and CWD are not included in the POU for any of the San Lorenzo River water rights, which include rights related to Newell Creek, Felton Diversion and Tait Diversion.

The Proposed Project would facilitate future water transfers primarily to address overdrafted groundwater conditions in the Santa Cruz Mid-County and Santa Margarita Groundwater Basins and potentially support exchanges. The Santa Cruz Mid-County Groundwater Basin Groundwater Sustainability Plan (GSP) was completed and adopted by the Santa Cruz Mid-County Groundwater Agency in November 2019 and submitted to the Department of Water Resources on January 30, 2020 (MGA 2020). The GSP sets sustainability management criteria for each of the five sustainability indicators applicable to the basin and identifies projects and management actions to achieve and maintain basin sustainability. Baseline projects and management actions (Group 1), in conjunction with other projects and management actions planned to reach sustainability (Group 2), include water conservation and demand management, installation and redistribution of municipal groundwater pumping, Pure Water Soquel, Beltz ASR and other ASR elsewhere in the Santa Cruz Mid-County Groundwater Basin, water transfers/in lieu groundwater recharge and distributed stormwater managed aquifer recharge. Additional potential projects and management actions may be evaluated in the future (Group 3). The Proposed Project's water supply augmentation components, Santa Cruz ASR facilities (including Beltz ASR) and water transfers, are consistent with recommendations in the GSP. The GSP will guide ongoing management of the Santa Cruz Mid-County Groundwater Basin with a goal to achieve and maintain the basin's sustainability goal within 20 years and over a 50-year planning and implementation horizon (MGA 2019).

The Santa Margarita Groundwater Agency (SMGWA) is a groundwater sustainability agency that has three member agencies—SVWD, SLVWD, and the County of Santa Cruz. Since the early 1980s, SVWD has actively managed groundwater resources. In 1994, the agency formally adopted a Groundwater Management Plan in accordance with Assembly Bill 3030, also known as the Groundwater Management Act under California Water Code Section 10750 (SMGWA 2020). The main goal of the Groundwater Management Plan is to better manage the aquifers providing the community's drinking water through the management of quantity and quality of the groundwater supply. The SMGWA has drafted three key basin management goals: (1) ensure water supply reliability for current and future beneficial uses, (2) maintain water quality to meet current and future beneficial uses, and (3) prevent adverse environmental impacts. These goals are being re-evaluated as the SMGWA develops its GSP, which must be completed and submitted to the Department of Water Resources by 2022 (SMGWA 2020).

As explained in Section 3.4.3.3, Water Transfers and Exchanges and Intertie Improvements, it is estimated that approximately 98 mgd to 277 mgd (0.5 to 1.5 mgd from November 1–April 30) could be transferred by the City to SqCWD and/or CWD. Additionally, up to approximately 163 mgd (0.9 mgd from November 1–April 30) of water could be transferred by the City to SVWD and/or SLVWD. Potential future water transfers with SqCWD, CWD, SLVWD, and/or SVWD generally would serve to reduce groundwater pumping in existing overdrafted aquifers to allow

⁹ Conjunctive use refers to a range of actions and projects that provide for the coordinated management of surface water and groundwater supplies to increase total supplies and enhance water supply reliability. Conjunctive use actions and projects can also be used to sustainably manage groundwater supplies.

recovery, which is consistent with goals and recovery strategies identified in the Santa Cruz Mid-County Groundwater Basin GSP and goals established by the SMGWA. As such, future water transfers would enable groundwater basin recovery and would not be considered growth inducing. Existing plans for CWD, SLVWD and SVWD report adequate supplies to support planned growth in the service area, but recognize that long-term groundwater management is needed to alleviate overdraft conditions. As such, future potential water transfers between the City and these agencies as a result of the Proposed Project would support regional groundwater management goals and plans and would not be considered growth inducing.

Water transfers to SqCWD under the Proposed Project, in addition to water provided by Pure Water Soquel when it is operational (expected in 2022), could provide an additional source of water beyond what has been identified in the SqCWD 2015 UWMP as the amount needed to support planned growth with aquifer recovery. The objective of the water transfers, however, is to allow the SqCWD to reduce groundwater pumping. Water transfers from the City to neighboring agencies would not support new development because they would occur when the City's supplies would be in excess of the City's own needs, which will vary season to season and year to year. As indicated above, it is estimated that approximately 98 mgd to 277 mgd could be transferred to SqCWD and/or CWD. The water transfer could aid in further managing groundwater resources, and is also intended to provide an additional potential supplemental source to the City during multiple dry-year periods if such water is returned to the City, which would be determined in future agreements with neighboring water agencies. Furthermore, as indicated above, development within the unincorporated areas served by the SqCWD is regulated by the County of Santa Cruz, including limitations imposed by growth management ordinances that require annual limits on issuance of residential building permits. In this way, development within unincorporated areas is controlled and limited. Therefore, the Proposed Project would not indirectly induce substantial population growth.

5.4.3 Conclusion

The Proposed Project would not directly foster economic or population growth or construction of additional housing, as it would not result in construction of new residential or commercial development and would not result in a substantial number of new permanent employees that would induce population growth or construction of new housing. The Proposed Project would not indirectly induce population growth through the expansion of public services into an area that does not currently receive these services. There are no obstacles to population growth that would be removed or affected as a result of the Proposed Project.

An increase in available water supplies within the areas served by the City over existing conditions would occur as a result of the combined Proposed Project components. These supplies, however, would provide needed water to meet projected demand during times of shortfall without an overall expansion in water supplies or total permitted water rights. The proposed water rights modifications would support the implementation of the City's Water Supply Augmentation Strategy Element 1 (passive recharge of regional aquifers via water transfers) and Element 2 (active recharge of regional aquifers via ASR) to deliver a safe, adequate, reliable and environmentally sustainable water supply. Thus, the proposed water rights modifications and ASR facilities would provide needed supplemental water supplies during times of identified water supply shortfalls.

While demand projections are associated with growth already anticipated in areas served by the City, the Proposed Project would provide for planned population growth as set forth in the 2015 UWMP, which is consistent with and lower than current AMBAG regional population forecasts. Therefore, the Project would not induce substantial unplanned population growth, resulting in a less-than-significant impact related to potential inducement of unplanned population growth. The level of planned population growth identified in the City's 2015 UWMP that would

be supported by the Proposed Project also is consistent with local general plans. Furthermore, the UWMP forecasts a continued reduction in water demand despite population growth due to implementation of planned water conservation strategies. Therefore, the Proposed Project would not serve growth in excess of what is forecasted for the areas served by the City.

A primary purpose of the Proposed Project is to provide water supplies during dry periods and multiple drought years and to provide flexibility in implementing a conjunctive water use strategy within the areas served by the City and with other regional partners to promote sustainable groundwater management due to overdrafted regional aquifers. Existing plans for SVWD, SLVWD, SqCWD and CWD report adequate supplies to support planned growth in their respective service areas, but recognize that long-term groundwater management is needed to alleviate overdrafted groundwater conditions. As such, future potential water transfers between the City and these agencies as a result of the Proposed Project would support regional groundwater managements goals and plans and would not be considered growth inducing.

5.5 References

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