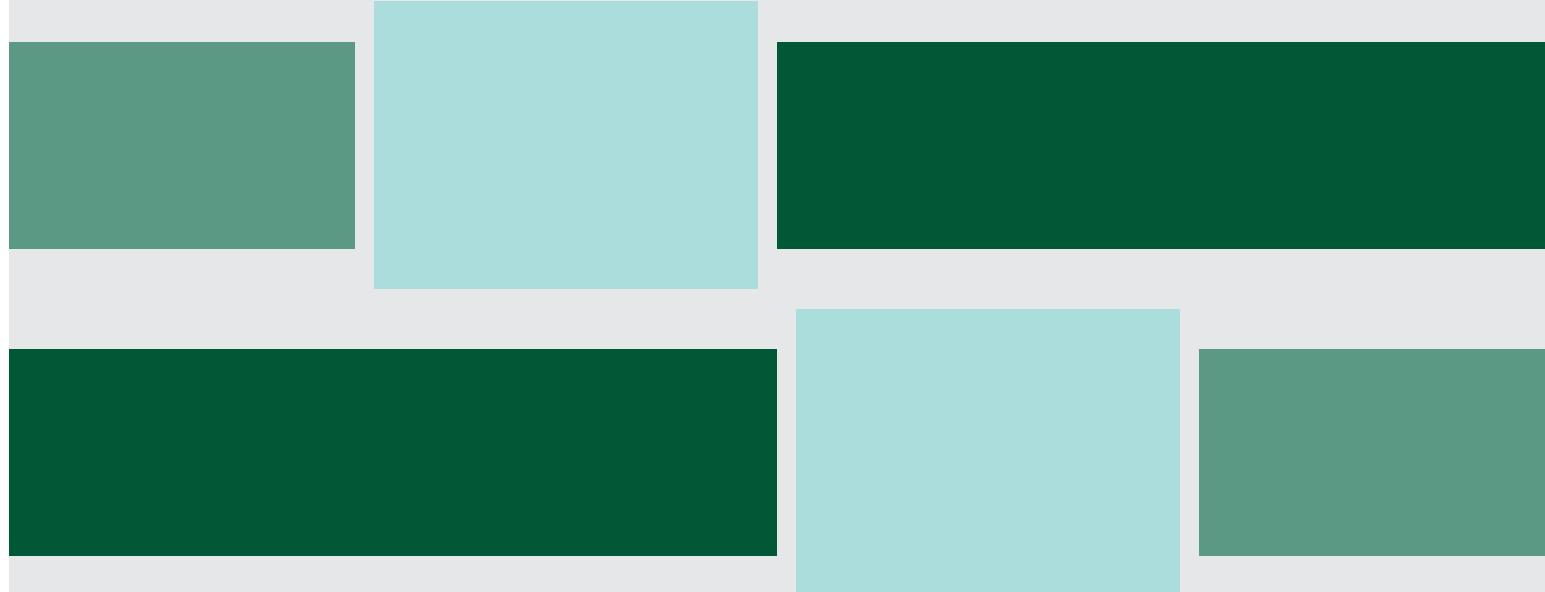


Initial Study/Addendum

City of Morgan Hill Housing Element 2023-2031



Prepared by



50 YEARS In Consultation with
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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY/ADDENDUM

The City of Morgan Hill, as the Lead Agency, has prepared this Initial Study/Addendum for the City of Morgan Hill Housing Element 2023-2031 (“Project”) in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Morgan Hill, California.

On July 27, 2016, the City Council certified the Morgan Hill 2035 Final Environmental Impact Report (FEIR) (State Clearinghouse No. 2015022074) and adopted the Morgan Hill 2035 General Plan (Resolution No. 16-128). The Morgan Hill 2035 FEIR evaluated adoption and implementation of the proposed General Plan and proposed Residential Development Control System (RDCS). The General Plan includes land use, urban design, circulation, public services, natural resources, and safety goals, policies, and actions to guide investment and development in the City of Morgan Hill over the next 20 years. The RDCS would regulate population growth through the provision of residential building allotments on a yearly or bi-annual basis. The RDCS establishes an absolute population cap of 58,200 through January 1, 2035, and limits residential allotments to 215 per calendar year.¹ However, the Morgan Hill 2035 FEIR assumed full buildout for residential development through the horizon year 2035.

The EIR included analyses for all applicable CEQA resource areas and identified the following impacts as significant and unavoidable with the assumption of full buildout of the General Plan:

- Agriculture and Forestry Resources
- Air Quality
- Greenhouse Gas Emissions
- Traffic and Transportation

In certifying the Morgan Hill 2035 FEIR and approving the General Plan Update, the City of Morgan Hill City Council adopted a statement of overriding consideration for the 2035 General Plan for the above mentioned significant and unavoidable impacts, in accordance with CEQA Guidelines Section 15093.

The purpose of this Initial Study/Addendum is to evaluate the potential environmental impacts of the proposed 2023-2031 Housing Element (as described in Section 3.0 Project Description) and determine whether the Project is within the scope of development program described in the 2035 General Plan and evaluated in the Morgan Hill 2035 FEIR, and whether the project has the potential to result in any new or substantially more severe environmental impacts.

The Morgan Hill 2035 FEIR was prepared as a program EIR pursuant to CEQA Guidelines Section 15168. Once a program EIR has been certified, subsequent activities within the program must be evaluated to determine whether additional CEQA review needs to be prepared. This Initial

¹ On January 1, 2020, Senate Bill (SB) 330 was signed into law and enacted Government Code Section 66300, the “Housing Crisis Act of 2019.” The Housing Crisis Act pre-empts and precludes the enforcement of these portions of the RDCS while the Housing Crisis Act is in effect.

Study/Addendum for the Housing Element Update is also being prepared as a program-level document. If a subsequent activity would have effects that are not within the scope of a program EIR, then the City must prepare a new Initial Study leading to a Negative Declaration, a Mitigated Negative Declaration, or an EIR. Therefore, future development allowed under the Housing Element Update would necessitate subsequent project-level review. In some cases, project-level environmental review has already been conducted for pipeline residential projects (refer to Section 3.4.1 of this Initial Study/Addendum).

The proposed 2023-2031 Housing Element will replace the existing 2015-2023 Housing Element and serve as the City of Morgan Hill's guiding policy document that meets future needs of housing for all the city's economic levels. The Housing Element is one of seven separate elements that make up the General Plan. As a policy document, the Housing Element does not result in direct physical changes to the environment but would indirectly lead to physical environmental changes by encouraging the provision of affordable and market rate housing in the housing development projected for the existing land use designations in the Land Use Element of the General Plan. None of the policies in the proposed Housing Element would change the existing land use pattern established by the General Plan and evaluated in the Morgan Hill 2035 General Plan FEIR. All future housing development in the City must comply with the General Plan, zoning ordinance, state and federal permits, and local development standards. In addition, future discretionary actions (i.e., use permits, site plan review) require independent and project-specific environmental review to comply with the California Environmental Quality Act (CEQA).

The Morgan Hill 2035 FEIR was a "Program EIR", which is defined by CEQA Guidelines Section 15168 as:

- (a) **General.** A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
 - (i) Geographically,
 - (ii) As logical parts in the chain of contemplated actions,
 - (iii) In connection with issues of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
 - (iv) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

Pursuant to CEQA Guidelines Section 15168(c), Program EIRs may be used for subsequent activities contemplated in the Program EIR. CEQA Guidelines Section 15168(c) states:

- c) **Use with Later Activities.** Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.
 - (i) If a later activity would have effects that were not examined in the program EIR, a new study would need to be prepared leading to either an EIR or a negative declaration.
 - (ii) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.

- (iii) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
- (iv) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.
- (v) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

The CEQA Guidelines Section 15162 states that when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the Lead Agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines Section 15164 states that the Lead Agency or a Responsible Agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in 15162 (see above) calling for preparation of a subsequent EIR have occurred. Pursuant to CEQA Guidelines §15164(d), the Lead Agency shall consider the addendum with the Final EIR prior to making a decision on the project.

1.2 NOTICE OF DETERMINATION

If the project is approved, the City of Morgan Hill will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Morgan Hill Housing Element 2023-2031

2.2 LEAD AGENCY CONTACT

City of Morgan Hill
Adam Paszkowski, Principal Planner
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (408) 310-4635
Email: adam.paszkowski@morganhill.ca.gov

2.3 PROJECT LOCATION

Morgan Hill is a city of 13 square miles located in the southern part of Santa Clara County. The City is located approximately 20 miles south of downtown San José and approximately 13 miles north of Gilroy. This Initial Study/Addendum focusses on the analysis of potential physical environmental changes within the City limits and Sphere of Influence.²

Regional and aerial maps of the City are shown on Figure 2.4-1 and Figure 2.4-2, respectively.

2.4 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

2.4.1 City of Morgan Hill

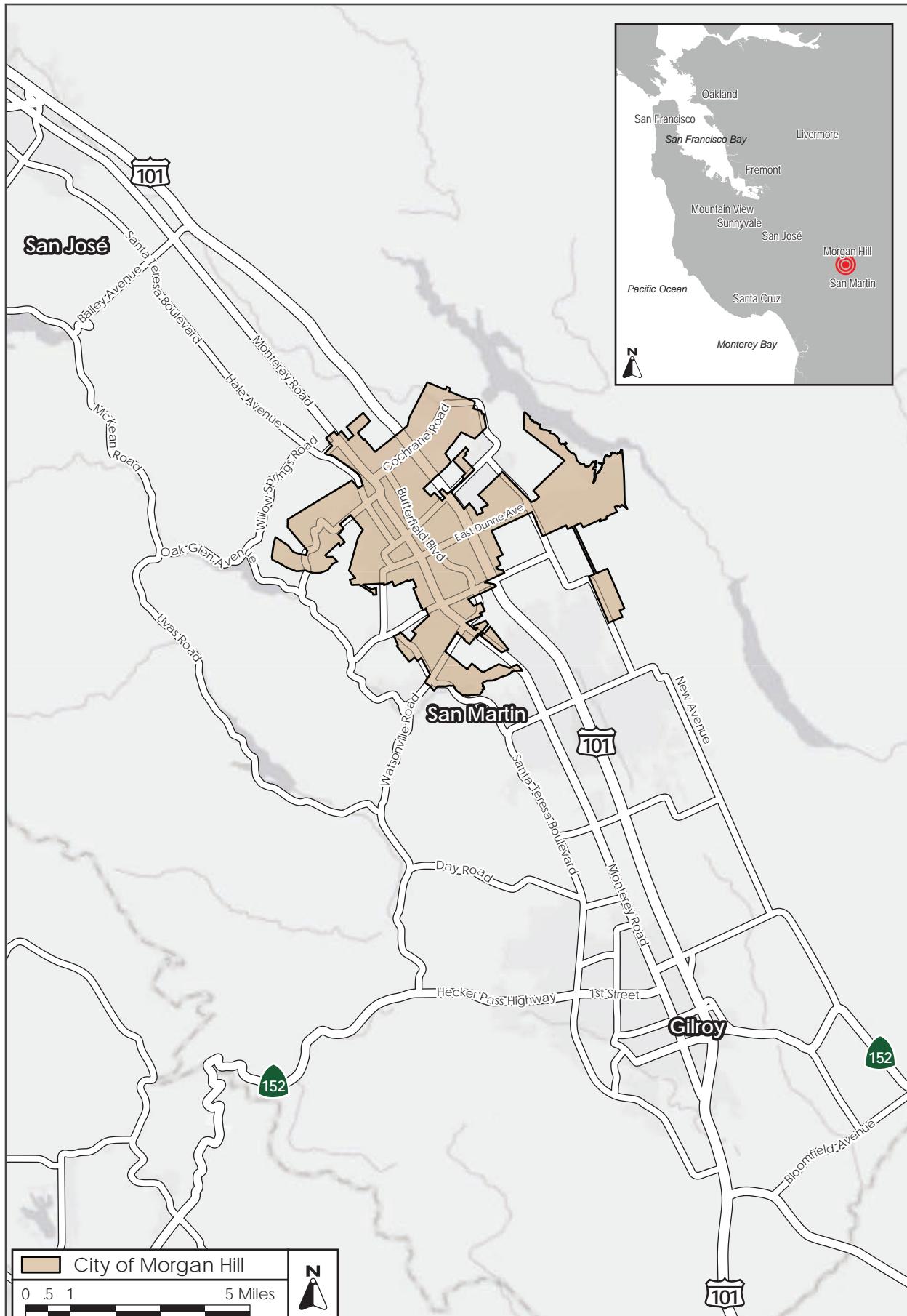
The project would require the following discretionary approvals from the City of Morgan Hill:

- Adoption of the 2023-2031 Housing Element
- Adoption of the 2023-2031 Housing Element Initial Study/Addendum

2.4.2 California Department of Housing and Community Development

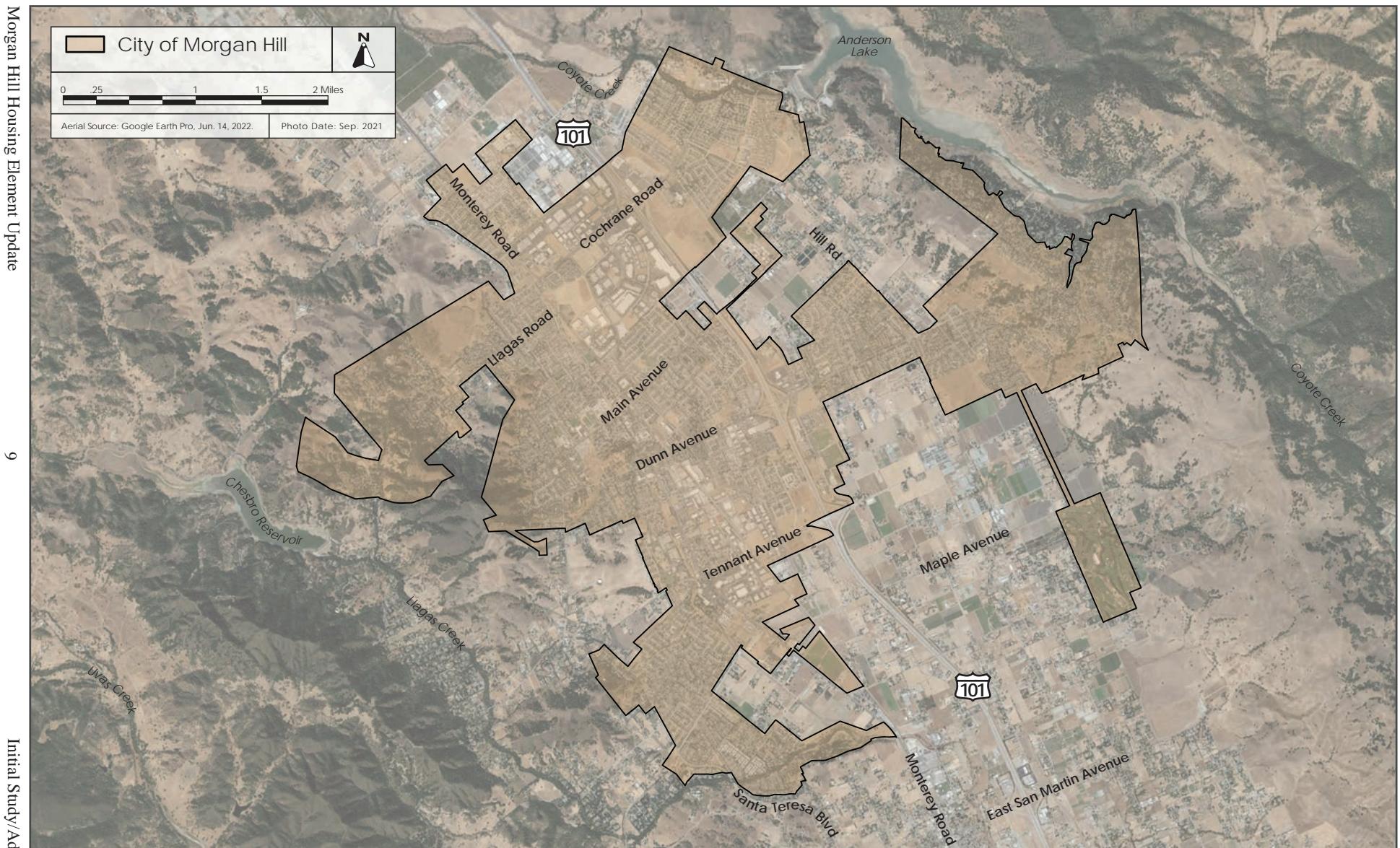
In addition to the discretionary approval identified above, the 2023-2031 Housing Element must be reviewed for compliance with state law and approved by the California Department of Housing and Community Development prior to the City's final adoption of the 2023-2031 Housing Element.

² The Sphere of Influence is a boundary that identifies land that the City may annex in the future, and for which urban services, if available, could be provided. Under state law, the SOI is established by the Santa Clara County Local Agency Formation Commission (LAFCO) with input from the City, and its purpose is to identify areas where future urban development can be best accommodated in an orderly and efficient manner. The current SOI is approximately 31 square miles in size.



REGIONAL MAP OF THE CITY OF MORGAN HILL AND SURROUNDING AREA

FIGURE 2.4-1



AERIAL PHOTOGRAPH OF THE CITY OF MORGAN HILL

FIGURE 2.4-2

SECTION 3.0 PROJECT DESCRIPTION

3.1 BACKGROUND

3.1.1 Morgan Hill 2035 General Plan

Since 1969, the State of California has required all California cities and counties to have a General Plan (California Government Code Section 65300). The General Plan is a state-required legal document that each planning agency in California prepares and the legislative body of each county and city adopts to provide a comprehensive, long-term plan for the physical development of the county or city. A General Plan must include the following seven mandatory elements specified in Government Code Section 65302: a) land use, b) circulation, c) housing, d) conservation, e) open space, f) noise, and g) safety. The General Plan is the City's official policy for its future character, form, and quality of development. The General Plan describes the amount, type and phasing of development needed to achieve the City's social, economic, and environmental goals. It is the policy framework for decision making on both private development projects and City capital expenditures. The current General Plan ("General Plan 2035") was adopted by the City Council in 2016.

3.1.2 Housing Element

As noted above, the Housing Element is one of seven state-mandated General Plan elements. The required contents of a housing element are set forth in California Government Code Section 65583. Among other requirements, housing elements are required to adequately plan to meet their existing and projected housing needs, including their share of the "regional housing need". The law recognizes that in order for the private sector to adequately address housing needs and demand, local governments must adopt land use plans and regulatory schemes that provide opportunities for, and do not unduly constrain, housing development. Specifically, Section 65583 states that the Housing Element shall consist of "...an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources and scheduled programs for the preservation, improvement, and development of housing." The Housing Element must also contain a schedule of actions that the local government is undertaking to implement the goals and objectives (i.e., the city's required contribution to the provision of housing for the region). State law requires that the Housing Element be updated periodically, usually every eight years. It is subject to detailed statutory requirements and mandatory review by the California Department of Housing and Community Development (HCD).

The City's current housing element (2015-2023) was adopted by the City Council in April 2015 and certified by HCD. The adopted housing element covers the period between January 31, 2015 and January 1, 2023. State law requires all nine Bay Area counties and the local jurisdictions therein to update their respective housing elements to account for their regional housing needs allocation (discussed below in Section 3.3 Regional Housing Needs Allocation) and submit them to HCD by January 31, 2023. The City of Morgan Hill's proposed 2023-2031 Housing Element Update (herein referred to as the "Housing Element Update", or, "Project") is discussed in detail below in Section 3.6 Buildout Projections.

3.2 EXISTING CONDITIONS

3.2.1 Population and Employment

In 2020, the population of Morgan Hill was estimated to be 46,454.³ Since 2000, Morgan Hill's population has increased by 38.3 percent; this rate is above that of the region as a whole. The population of Morgan Hill makes up 2.4 percent of Santa Clara County.⁴

There are 21,775 employed residents, and 18,428 jobs in Morgan Hill - the ratio of jobs to resident workers is 0.85; Morgan Hill is a net exporter of workers.⁵

3.2.2 Housing Supply

The housing stock of Morgan Hill in 2020 was made up of 59 percent single family detached homes, 17.7 percent single family attached homes, 5.5 percent multifamily homes with 2 to 4 units, 9.8 percent multifamily homes with 5 or more units, and 8 percent mobile homes.⁶

Between 2015 and 2019, 1,542 housing units were issued permits in Morgan Hill. 77.8 percent of permits issued in Morgan Hill were for above moderate-income housing, 8.8 percent were for moderate-income housing, and 13.4 percent were for low- or very low-income housing.⁷ The number of homes in Morgan Hill increased, 19.4 percent from 2010 to 2020, which is above the growth rate for Santa Clara County and above the growth rate of the region's housing stock during this time period.

3.3 REGIONAL HOUSING NEEDS ALLOCATION

Under state law, the HCD is required to allocate a region's share of the projected statewide housing need to its council of governments, based on California Department of Finance population projections and regional population forecasts. The Association of Bay Area Governments (ABAG) is the regional authority charged with preparing the regional housing needs allocation (RHNA), which quantifies the housing need for local jurisdictions in the San Francisco Bay Area. Once the region's fair share of regional housing need is agreed upon, the housing need is allocated amongst all of the jurisdictions (cities/counties) within that region, and the city's fair share of regional housing need is calculated for each established planning horizon.

The City's fair share of the regional housing need for the upcoming Housing Element cycle of 2023 to 2031 was calculated as 1,037 housing units. Additionally, the No Net Loss Law (California Government Code Section 65863) requires that enough sites are available at all times throughout the RHNA planning period to meet a jurisdiction's remaining unmet housing needs for each income category. To ensure that sufficient capacity exists in the housing element to accommodate the RHNA throughout the planning period, HCD recommends jurisdictions create a buffer in the housing element inventory of at least 15 percent (in the case of Morgan Hill, equivalent to an additional 156

³ City of Morgan Hill. *City of Morgan Hill Housing Element 2023-2031*. Appendix H1. Housing Needs Assessment.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

units allocated to the City for the 2023-2031 period). Table 3.3-1 below presents the City's RHNA and 15 percent buffer broken down by household income category.

Table 3.3-1: City of Morgan Hill RHNA by Household Income Category			
Household Income Category¹	RHNA	15 Percent Buffer	Combined Housing Targets²
Very Low (<50% AMI)	262	39	301
Low (50-80% AMI)	151	23	174
Moderate (80-120% AMI)	174	26	200
Above Moderate (>120% AMI)	450	68	518
Total Housing Units	1,037	156	1,193

Source: Association of Bay Area Governments. *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031*. December 2021.

Notes:

¹ The AMI (area median income) in Morgan Hill as of 2020 was \$128,373. Source: U.S. Census Bureau. “QuickFacts Morgan Hill city, California”. Accessed May 18, 2022. <https://www.census.gov/quickfacts/fact/table/morganhillcitycalifornia,sanbrunocitycalifornia/POP010210>

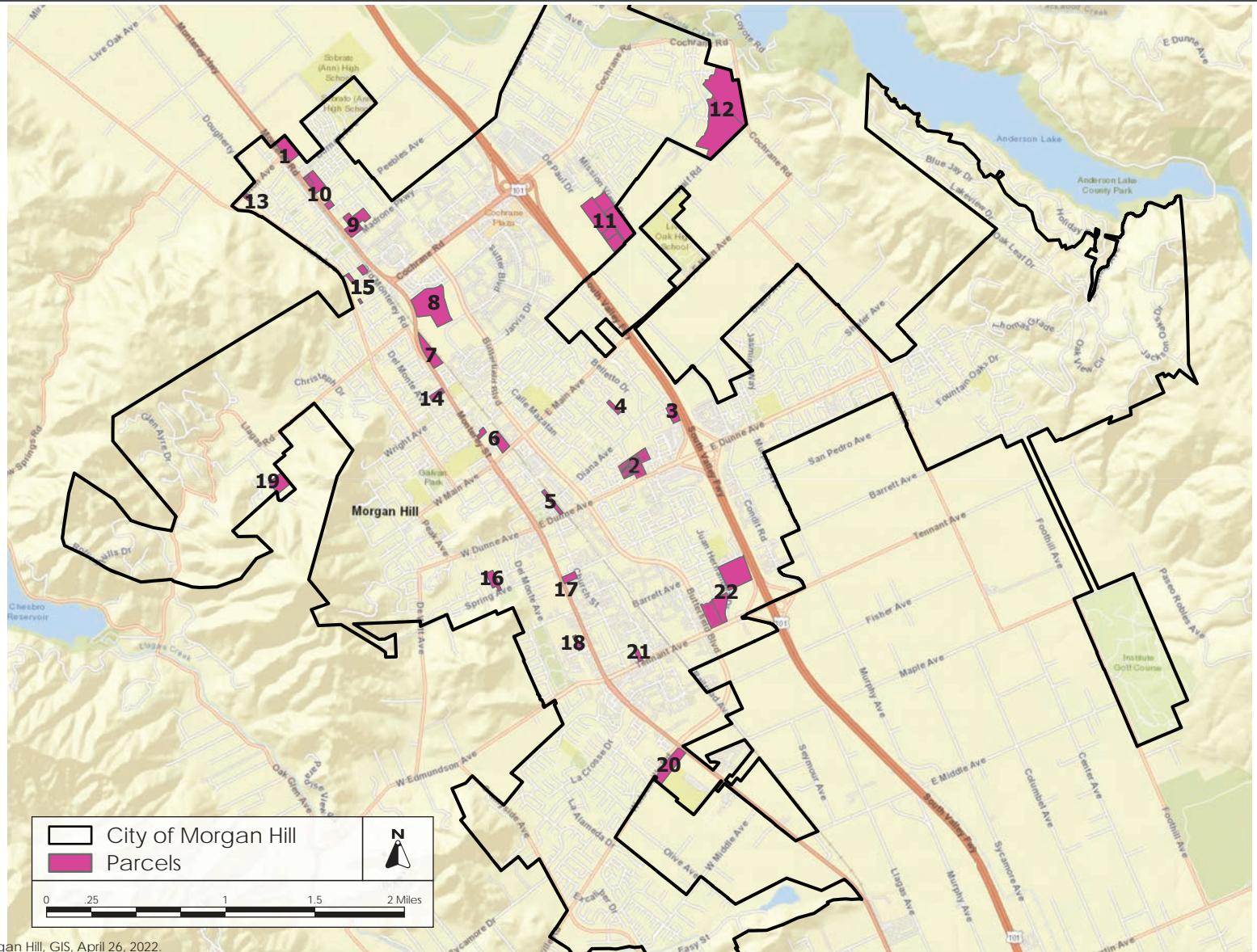
² Combined targets calculated by adding the City's RHNA with the proposed 15 percent buffer.

3.4 PLANNED AND ENTITLED PROJECTS

3.4.1 Pipeline Residential Capacity

The City has a significant pipeline of development projects that are seeking entitlements or are entitled and actively pursuing construction, as summarized in Table 3.4-1 and shown on Figure 3.4-1). As of March 1, 2022, there were an estimated 1,821 housing units in the pipeline (planned or entitled) that are counted toward meeting the RHNA, which include single-family dwellings, deed-restricted affordable units, market rate condominiums and multi-unit development, and individual affordable housing developments (refer to Table 3.4-1). The City has received applications for Building Permits for several projects identified in Table 3.4-1, totaling 1,068 units (units are denoted by *).

In addition to the pipeline of development projects, the City has also identified a number of parcels where future residential development could occur, these parcels account for 391 housing units. These are reflected in Table 3.4-1 as “No Project.” As shown in Table 3.4-1, the City's total residential capacity, including planned or entitled projects and future residential development, is 2,212 units.



CITY OF MORGAN HILL HOUSING ELEMENT PROJECT LOCATIONS

FIGURE 3.4-1

Table 3.4-1: Pipeline Residential Capacity

Location Id	Project Name	Address (APN)	Size (acres)	General Plan	Zoning	Housing Capacity by Income					Total
						Above Moderate	Moderate	Low	Very Low	Extremely Low	
1	Monterey-Lucky Shing Manzinita Park SR2020-0017	Monterey Road (APN 725-010-18) ²	5.83	MUFlex	MU-F (PD)	57	10	-	-	-	67
2	E. Dunne-Young (Andalusia) SR2018-0020	East Dunne Avenue (APNs 726-020-51 & 726-020-52) ³	2.33	RAM	RAM	42	1	3	-	-	46*
2	No Project	726-020-12	4.84	MUFlex	PUD	-	19	19	19	19	76
2	No Project	726-020-16	2.3	RAM	RAM	-	9	9	9	9	36
3	No Project	726-070-21	3.4	RDM	RDM 9,000	11	2	-	-	-	13
4	Dakota-Dunne SR2021-0003	761 Dakota Drive (APN 726-090-24) ²	1.22	RDM	RDM 7,000	3	3	-	-	-	6
5	Depot-Latala (Hale Lumber)	17020 Depot	2.05	MU	MU-D	49	-	-	-	-	49*

Table 3.4-1: Pipeline Residential Capacity

Location Id	Project Name	Address (APN)	Size (acres)	General Plan	Zoning	Housing Capacity by Income					Total
						Above Moderate	Moderate	Low	Very Low	Extremely Low	
	SR2019-0003	Street (APN 726-130-49) ³									
6	No Project	726-230-18	2.52	MU	MU-N	-	10	10	10	10	40
6	No Project	726-230-19	0.87	MU	MU-N	--	3	4	3	4	14
6	No Project	726-230-20	0.91	MU	MU-N	-	3	4	3	4	14
7	Monterey-City Ventures SR2019-0026	18110 Monterey Road (APN 726-250-06) ³	6.69	MUFle x	MU-F	86	15	-	-	-	101*
8	Jarvis-MH Apartments (Braddock & Logan) SR2019-0015	Monterey Road (APN 726-250-95) ³	19.5	MUFle x	MU-F	-	311	-	78	-	389*
9	Monterey-Minor (Jemcor) SR2020-0027	18960 Monterey Road (APN 726-360-59) ³	7.52	RAL / MUFle x	RAL 3,500 / MU-F	-	3	196	25	25	249*

Table 3.4-1: Pipeline Residential Capacity

Location Id	Project Name	Address (APN)	Size (acres)	General Plan	Zoning	Housing Capacity by Income					Total
						Above Moderate	Moderate	Low	Very Low	Extremely Low	
10	No Project	726-410-65	0.9	MUFlex	MU-F	-	3	4	3	4	14
10	Monterey-Kerley (DeNova Homes) SR2021-0014	19380 Monterey Road (APNs 726-420-01 through 726-420-03) ¹	4.6	MUFlex	MU-F	79	14	-	-	-	93
11	Half-Dividend (Crosswinds) SR2020-0010	Half Road and Mission (APNs 728-300-01 through 728-300-04) ¹	28.88	RAL	RAL 3,500	229	40	-	-	-	269
12	Cochrane-Toll Brothers SR2021-0011	Cochrane Road (APNs 728-340-32 & 728-340-33) ³	54.42	RDL	RDL 20,000	114	23	-	-	-	137*

Table 3.4-1: Pipeline Residential Capacity

Location Id	Project Name	Address (APN)	Size (acres)	General Plan	Zoning	Housing Capacity by Income					Total
						Above Moderate	Moderate	Low	Very Low	Extremely Low	
13	Tilton-Lee Schmidt SR2018-0009	280 Tilton Avenue (APN 764-090-04) ²	0.78	RDL	RDL 12,000	1	1	-	-	-	2
14	Monterey-First Community Housing (Magnolias) SR2021-0005	17965 Monterey Road (APN 764-120-06) ²	1.54	MUFlex	MU-F	-	1	14	9	42	66
15	Campoli-Squires SD2021-0002	185 Campoli Drive (APN 764-240-05) ²	0.74	RDM	RDM 7,000	1	-	-	-	-	1
15	Sanchez-Brewer SD2020-0001	185 Sanchez Drive (APN 764-240-76) ²	0.24	RDM	RDM 7,000	1	-	-	-	-	1
15	Old Monterey-Appletree (Kelly Vo)	18755 Monterey Road (APN	1.13	RDM	RDM 7,000	5	2	-	-	-	7

Table 3.4-1: Pipeline Residential Capacity

Location Id	Project Name	Address (APN)	Size (acres)	General Plan	Zoning	Housing Capacity by Income					Total
						Above Moderate	Moderate	Low	Very Low	Extremely Low	
	AAE2021-0002	764-240-61) ²									
16	Spring-Ginacola SR2020-0028	335 Spring Road (APN 767-110-30) ³	2.78	RAL	RAL 3,500	19	3	-	-	-	22*
17	Monterey-Morgan Hill Senior Housing SR2020-0005	16685 Church Street (APN 817-020-67) ²	1.89	MUFle x	MU-F	-	1	25	13	43	82
18	Edes-Alcini (TTLG Morgan Hill) SR2022-0001	Monterey Road (APN 767-180-46) ¹	1.1	MUFle x	MU-F	18	3	-	-	-	21
19	Llagas-Strolata Properties (Silvas) SR2018-0025	1110 Llagas Road (APN 773-320-13) ²	4.6	RE	RE 1	4	-	-	-	-	4
20	Watsonville-Hordness (Crossings at	15440 Monterey Road	8.19	MUFle x	MU-F (PD)	-	1	-	24	48	73*

Table 3.4-1: Pipeline Residential Capacity

Location Id	Project Name	Address (APN)	Size (acres)	General Plan	Zoning	Housing Capacity by Income					Total
						Above Moderate	Moderate	Low	Very Low	Extremely Low	
	Monterey/Roya 1 Oaks Village) SR2020-0023	(APN 779-040-75) ³									
21	Tenant-Osito Holdings SR2020-0014	215 Tenant Avenue (APN 817-040-59) ²	0.99	RAL	RAL 3,500	14	2	-	-	-	16
22	No Project	817-090-36	5.22	RAM	RAM	71	12	-	-	-	83
22	Lillian Commons/Rosewood SR2022-0002	Juan Hernandez Drive and Barrett Avenue (APN 817-090-41) ¹	9.48	MUFlex	MU-F	111	9	-	-	-	120
22	No Project	817-090-55	6.35	RAM	RAM	--	25	25	25	26	101
Subtotal						915	529	313	221	234	2,212
<p>Notes:</p> <p>1 Pending project based on the affordability and unit count within the proposed project expected to be built within the 2023-2031 planning period.</p> <p>2 Entitled project based on the affordability and unit count of the approved development expected to be built within the 2023-2031 planning period.</p> <p>3 Affordability and unit count of the approved development based on Building Permits submitted to City of Morgan Hill and expected to be built within the 2023-2031 planning period.</p> <p>* The City of Morgan Hill has received Building Permit applications for this project.</p>											

3.4.2 Pipeline Residential Potential

It is plausible that not all the projects summarized in Table 3.4-1 would be completed during the 6th Cycle of 2023-2031. Therefore, the City evaluated completion rates of pipeline development projects during the 5th Cycle (2015-2022). For discretionary entitlements, completion rates were found by drawing upon all planning entitlement applications and approvals and finding the percentage of those projects which have obtained a building permit and therefore reached completion. This analysis found that entitlement applications had a completion rate of 88.7 percent, while approved entitlements had a completion rate of 91.7 percent. For building permit applications and approved permits, completion rates were established based on evaluating all residential building permits issued for new residential units, as well as all issued building permits that have been finalized/received a certificate of occupancy, from January 1, 2015, through December 31, 2020. The report found that building permits have a 99.2 percent completion rate for issued permits. Those completion rates were then applied to the current pipeline to determine the number that would be expected to be completed within the next eight years, as summarized by income category in Table 3.4-2 below.

Table 3.4-2: Pipeline Residential Potential by Income Category

	Above Moderate	Moderate	Low	Very Low	Extremely Low	Total
Active Planning Entitlements	388	59	-	-	-	447
Approved Planning Entitlements with No Building Permit	79	18	36	20	78	231
Building Permit Applications	308	356	197	126	73	1,060
Total	775	433	233	146	151	1,738

3.5 **HOUSING CAPACITY TO ACCOMMODATE RHNA**

State law requires each jurisdiction to demonstrate that sufficient land is zoned to provide housing capacity that is adequate to meet the RHNA for each income level. As shown in Table 3.4-1, the City has a total residential development pipeline capacity (planned or entitled) of 1,821 units. After incorporating the success criteria percentages described above in Section 3.1.4.1 Planned and Entitled Projects, the City has a total residential development pipeline potential of 1,738 units, which is sufficient capacity to accommodate the RHNA of 1,037 units and the additional 156 units required for the buffer (refer to Table 3.5-1).

In addition to the planned or entitled units shown in Table 3.4-1, the City has identified a number of parcels where future residential development could occur, these parcels account for 391 housing units. These are reflected in Table 3.4-1 as “No Project.”

Table 3.5-1: Summary of Residential Capacity Compared to RHNA by Income

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
6th Cycle RHNA	131	131	151	174	450	1,037
Pipeline Residential Capacity	158	149	238	443	833	1,821
Pipeline Residential Potential	151	146	233	433	775	1,738
Total Capacity	151	146	233	433	775	1,738
Surplus(+)/Deficit(-)	+20	+15	+82	+259	+325	+701

3.6 BUILDOUT PROJECTIONS

The full buildout residential growth projections assumed in the Morgan Hill 2035 General Plan are summarized in Table 3.6-1. All of the City's pipeline residential capacity (1,821 units), as well as the additional 391 housing units allowed on the sites the City has also identified where future residential development could occur, as reflected in Table 3.4-1 as "No Project," falls within the buildout projections assumed in the Morgan Hill 2035 Final EIR (or a total of 2,212 units). Therefore, implementation of the Housing Element Update would not exceed the City's full buildout projection identified in the 2035 General Plan. For these reasons, no changes are proposed to the General Plan Land Use diagram to accommodate the housing needed to meet the City's RHNA target, given adequate available land exists under the currently adopted General Plan with appropriate residential and mixed-use land use designations.

Table 3.6-1: 2035 General Plan Population Projections

	Existing Development	Net Growth	Full Buildout Projection
Housing Units			
Single-Family	10,821	2,360	13,181
Multi-Family	4,148	5,071	9,219
Population			
Residents	45,171	22,886	68,057

Source: City of Morgan Hill. *Morgan Hill 2035 DEIR*. Table 3-2. January 2016.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section. This Initial Study/Addendum evaluates the potential environmental impacts of the proposed 2023-2031 Housing Element (as described in Section 3.0 Project Description) to determine whether the Project is within the scope of the development program described in the 2035 General Plan and evaluated in the Morgan Hill 2035 FEIR, and to determine whether the project has the potential to result in any new or substantially more severe environmental impacts.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically vehicle miles traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. Under SB 743, a project's aesthetic impacts will no longer be considered significant impacts on the environment if:

- The project is a residential or mixed-use residential project, and
- The project is located on an infill site within a transit priority area.⁸

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

Senate Bill 330

SB 330 was adopted in 2019 to respond to the California housing crisis. The bill establishes regulations that sunset on January 1, 2025. SB 8 extends the sunset provision to January 1, 2030. Under SB 330, affected cities⁹ are prohibited from rezoning or imposing new development standards that would reduce capacity for housing or adopting new design standards that are not objective. Objective zoning standards and objective design review standards involve no personal or subjective judgment by a public official and are uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant or proponent and the public official prior to submittal.

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to

⁸ An “infill site” is defined as “a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.” A “transit priority area” is defined as “an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan.” A “major transit stop” means “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.” Source: Office of Planning and Research. “CEQA Review of Housing Projects Technical Advisory.” Accessed April 19, 2022.

https://opr.ca.gov/docs/20190208-TechAdvisory-Review_of_Housing_Exemptions.pdf.

⁹ SB 330 defines an “affected city” as any city that is located in an urbanized area or urban cluster, as designated by the United States Census Bureau.

protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in Morgan Hill. In Santa Clara County, the one state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos City Limit. Eligible State Scenic Highways (not officially designated) include SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9, Interstate 280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to aesthetic and visual impacts. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Aesthetics

Policy	Description
NRE-1.1	Natural Features. Preserve outstanding natural features, such as the skyline of a prominent hill and rock outcroppings.
NRE-2.1	Hillside and Ridgeline Views. Protect views of hillsides, ridgelines, and prominent natural features surrounding the City. These features help define the City's historic rural character, sense of place, image and identity.
NRE-2.2	El Toro Mountain as Landmark Feature. Retain the City's unique identity by preserving its landmark natural feature, El Toro Mountain.
NRE-2.3	Scenic Hillside Preservation. Preserve scenic hillsides around the City in an undeveloped state, wherever feasible. Provide for retention of hillside areas as open space through the dedication and/or purchase of scenic easements and/or open space easements, transfer of development rights and other appropriate measures.
NRE-2.4	Building Distance below Ridgelines. Limit all building pads located within the hillside areas to an elevation at or below the 80-foot vertical drop from the ridgeline.
NRE-5.3	Natural State of Streamside and Riparian Areas. Retain natural streamside and riparian areas in their natural state in order to preserve their value as percolation and recharge areas, natural habitat, scenic resources, and recreation corridors, and to stabilize banks. (South County Joint Area Plan 15.08)
CNF-8.1	High Quality Design. Require all development to feature high quality design that enhances the visual character of Morgan Hill.
CNF-8.2	Design Features. Encourage design features and amenities in new development and redevelopment, including but not limited to:
	<ul style="list-style-type: none">• Highly connected street layouts, supporting multiple paths of travel for all modes.• Cluster buildings to create useable open space.• Abundant landscaping.• Attractive transitions between uses.• Comfortable pedestrian facilities that promote a high level of pedestrian activity.• Distinctiveness and variety in architectural design.
CNF-8.3	Changes in Building Scale. Discourage abrupt changes in building scale. A gradual transition between low-rise to mid-rise buildings should be achieved by using the low-rise

Morgan Hill 2035 General Plan Policies: Aesthetics

Policy	Description
	buildings at the edge of the project site. Consider the relationship of buildings to the street, to one another and to adjacent structures and land uses.
CNF-8.7	Design Sensitivity. Ensure that new development is sensitive to the character of adjacent structures and the immediate neighborhood.
NRE-2.1	Hillside and Ridgeline Views. Protect views of hillsides, ridgelines, and prominent natural features surrounding the City. These features help define the City's historical rural character, sense of place, image, and identity.

City of Morgan Hill Municipal Code

Morgan Hill's Municipal Code regulates development in the City. The following provisions from the Municipal Code pertain to the visual effects of development:

- **Section 18.76.060, Glare**, establishes a regulation that no use or activity shall produce direct or sky-reflected glare that is visible at a distance of five hundred feet from such establishment or use.
- **Chapter 15.40, Building Security**, contains provisions, including lighting requirements, to protect the public by providing safeguards to protect property from unlawful trespass. Section 15.40.310 requires that open parking lots for nonresidential uses shall be illuminated with an intensity of at least two footcandles. Section 15.40.400 requires that open parking lots and carports for hotels and multifamily residential uses shall be illuminated with an intensity of at least two footcandles. Section 15.40.420 requires that aisles and passageways within the building complex shall be illuminated with an intensity of at least twenty-five one-hundredths (0.25) footcandles.
- **Title 18, Zoning**, contains site development standards for each zoning district, such as minimum lot area, maximum building coverage, maximum floor area ratio (FAR), minimum setbacks, maximum height, and yard size.
- Section 18.108.040, Design Permit, establishes the City's design permit process for the following types of projects: residential projects with three or more dwelling units; one or more new residential unit on a sensitive site; significant non-residential buildings; significant additions or other physical improvements visible from a public right-of-way; additions to residences on a sensitive site; significant exterior changes; grading of more than 50 cubic yards on slopes greater than 10 percent; new accessory structures on sensitive land; City projects; and other projects determined by the Community Development Director to be significant. The city shall evaluate applications to ensure that they satisfy the design review criteria, comply with the development standards of the zoning district, conform to policies of the general plan and any applicable specific plan, and are consistent with any other policies or guidelines the city council may adopt for this purpose. Most design review approval is granted by the Community Development Director, although in some instances projects are referred to the Planning Commission or City Council.
- Section 18.30.040, Hillside Combining District, establishes development standards for all areas within the City having an average slope of ten percent or greater to ensure for the orderly development of hillside areas while preserving significant environmental features and protecting public safety in geologically unstable areas.

Morgan Hill Downtown Specific Plan

The Morgan Hill Downtown Specific Plan, November 2009, encompasses 18 blocks and approximately 110 acres in downtown Morgan Hill in an area centered on Monterey Road. The urban design goals of the Downtown Specific Plan include:

- Creating an active Downtown village through intensifying residential, retail, restaurant, and entertainment uses, within an urban setting improved with unified landscaping and streetscape improvements.
- Making Monterey Road and Third Street more pedestrian and retail friendly, and improve other roads with better street lighting and streetscape improvements.
- Strengthening Downtown's identity and scale with new design related to a traditional character.
- Creating visual and physical linkages to Downtown with landscaping, bike paths and entry areas; and with linking downtown commercial uses to common parking areas available to the general public.

Residential Development Design and Development Standards

The City's Residential Development Design and Development Standards articulate project design requirements for all residential and mixed-use developments and have been developed to meet the requirements of "Objective Standards" under SB 330 and are consistent with the Morgan Hill 2035 General Plan. These standards are utilized to detail the review process by clearly stating the City of Morgan Hill's objectives for high quality, residential projects that are aesthetically pleasing, livable, sustainable, well-connected to neighborhood services. All residential and mixed-use projects are required to meet the intent of these standards unless it can be demonstrated to the satisfaction of the decision-making body for the development project that meeting the intent of the Residential Development Design and Development Standards is physically infeasible or detrimental to the environmental quality of the project or surrounding area. The Residential Development Design and Development Standards shall not apply to projects determined to be exempt from Design Review in accordance with Section 18.108.040.F of the City's Municipal Code.

4.1.1.2 *Existing Conditions*

Visual Character

Morgan Hill's location along the valley floor, with views of grassy and wooded hillsides to the east and west, provides a visual connection to the natural world. The slopes that flank Morgan Hill play a major role in shaping the character of the City. Agricultural lands have also been an important contributor to the City's rural character. Undeveloped and agricultural land separates the City from San Jose to the north and San Martin to the south. The rural character of these lands helps to define and distinguish the urbanized City area from other urban and rural county areas.

Scenic Corridors and Vistas

The existing General Plan does not designate official scenic view corridors or vistas. However, the General Plan recognizes that undeveloped hillsides (i.e., El Toro Mountain) visible from the valley floor are scenic characteristics of the area, and that views of prominent hillsides should be preserved.

Uninterrupted scenic vistas to the surrounding hillsides exist throughout the City, and are primarily in agricultural areas (i.e., the area east of Highway 101, area southeast of Monterey Road and Watsonville Road, or the area south of Edmundson Avenue), open spaces, and other areas that remain largely undeveloped. These views are considered scenic vistas.

Light and Glare

Sources of light and glare are abundant in the urban environment of the Housing Element Update project locations, including but not limited to streetlights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows. Light pollution in Morgan Hill is restricted primarily to street lighting along local streets, and to night-time illumination of shopping centers. Light spillage from residential developments is mostly screened by trees.

Housing Element Update Project Locations

There are a total of 31 Housing Element Update project locations with several of the parcels corresponding to one Identification number (e.g., Location 2, 6, and 15). Out of the 31 individual Housing Element Update project locations, four of the locations are pending entitlement, nine of the locations have no project associated with the parcel, and the remaining 18 of the locations are in the process of being entitled. The project locations that are entitled have already undergone a separate project-level analysis pursuant to the CEQA Guidelines; therefore, Locations 1, 2 (one of the three parcels [Project Number SR2018-0020]), 4, 5, 7, 8, 9, 12, 13, 14, 15 (all three parcels are entitled), 16, 17, 19, 20, and 21 are not discussed further. All the project locations are within the city boundaries and in proximity to existing urban development and the roadway network.

Pending Entitlement

The following Housing Element Update project locations are pending entitlement: Locations 10, 11, 18, 22. Each location is discussed individually below.

Location 10 is an approximately 4.6-acre site that includes APNs 726-42-002 (19380 Monterey Road) and 726-42-003 (19400 Monterey Road), which are located adjacent to Monterey Road and southeast of the Monterey Road and Burnett Avenue intersection. The parcels are currently commercial developments for the selling, renting, and servicing of family recreational vehicles. The parcels for Location 10 consist of parking lots for storage of vehicles and temporary garage buildings. The surrounding land uses consist of commercial uses to the north and south, and along the eastern boundary of the project location is a mobile home park. The southern property is a continuation of the family recreational vehicle commercial development. The parcels are not located within a designated scenic view corridor or visible from a designated scenic highway.

Location 11 is an approximately 28.9-acre site that includes APNs 728-30-001, 728-30-002, 728-30-003, and 728-30-004, which are located at the intersection of Half Road and Mission View Drive. The parcels are surrounded by developed and undeveloped parcels of land. The parcels to the north and west are undeveloped, flat, and covered with grasses. The parcel to the north contains a small fence which surrounds the utilities on the property. Immediately to the west of the site is a graveled road (future DePaul Drive). South of the site is a paved two-way roadway (Half Road), an open grassland area and a one-story wood-framed structure with a hipped roof. To the east of the site is a paved road (Mission View Drive) and an orchard with three one-story structures with gable-styled

roofs facing Half Road. Modern two-story residences made of stucco and hipped roofs are also east of Mission View Drive. The parcels are not located within a designated scenic view corridor or visible from a designated scenic highway.

Location 18 is an approximately 1.1-acre site that includes APN 767-18-046 and is located north of Edes Street and west of West Little Llagas Creek trail. The parcel is undeveloped and located in between commercial uses. To the east are a two-story strip mall and a single-story car wash with a gift shop. A mix of development and paved asphalt border the site's northern boundary and the Morgan Hill Unified School District Transportation Department, which is a parking lot for school buses, is located west of the site past West Little Llagas Creek trail. The parcel is not located within a designated scenic view corridor or visible from a designated scenic highway.

Location 22 is an approximately 9.5-acre site that includes APN 817-09-041 and is located west of Highway 101 and southeast of the Juan Hernandez Drive and Barrett Avenue intersection. The parcel is flat and mostly covered with non-native grasses with several trees located on the northern portion of the site and along the west property line near the existing single-story medical office buildings. The medical office buildings are flat-roofed grey buildings, modern in design, with clearstories and yellow roof. The parcel is surrounded by developed and undeveloped parcels. The parcel directly adjacent to the south of the project site is flat, undeveloped, and covered with grasses. There are two-story attached single-family stucco residences located west of the site on Juan Hernandez Drive. To the north and northeast of the site, across Barrett Avenue, there are additional two-story attached single-family stucco residences, as well as a public elementary school. The parcel is not located within a designated scenic view corridor or visible from a designated scenic highway.

No Project Locations

The following Housing Element Update project locations are not yet entitled and there are no pending projects associated with the parcel: Locations 2, 3, 6, 10, and 22, however each is planned for housing under the current General Plan. Each location is discussed individually below.

Location 2 consists of APNs 726-02-012, 726-02-016, which equate to approximately 7.1-acres. The parcels are vacant and undeveloped parcels located northwest of the East Dunne Avenue and Walnut Grove Drive intersections. The parcels are flat with several trees planted throughout APN 726-02-012 and ruderal vegetation through both APNs. The surrounding land uses include a coffee shop and pharmacy to the southeast of the parcels at the East Dunne Avenue and Walnut Grove Drive intersections. To the north are single-family residences and undeveloped parcels and to the west is a preschool and a residential development under construction. East Dunne Avenue borders the southern boundary of the parcel. The parcels are not located within a designated scenic view corridor or visible from a designated scenic highway.

Location 3 is a 3.4-acre site located at 17364 Walnut Grove Drive (APN 726-04-021) west of Highway 101 and east of Walnut Grove Drive. The parcel is vacant and undeveloped with only ruderal vegetation and trees on-site. Surrounding land uses include a single-family residential neighborhood to the west and north and a car dealership to the south. Highway 101 borders the eastern boundary. The parcel is not located within a designated scenic view corridor or visible from a designated scenic highway.

Location 6 consists of APNs 726-23-018 (95 East Main Avenue), 726-23-019, and 726-23-020 that total approximately 4.3-acres. APNs 726-23-018 and 726-23-019 are adjacent parcels located northeast of the Main Avenue and McLaughlin Avenue intersection. The existing uses on these parcels include a single-story construction equipment rental store (95 East Main Avenue) with parking lots and the other parcel is a private parking lot and storage area. The surrounding land uses include a senior three-story housing development to the north, an office park with four buildings to the east, and commercial buildings to the west. In addition, the Union Pacific railroad borders the parcels eastern boundaries. APN 726-23-020 is a separate L-shaped parcel located southwest of the Monterey Road and Central Avenue intersections. It is a vacant, undeveloped parcel with ruderal vegetation surrounded by commercial uses. Adjacent to the northern parcel boundary is a donut shop and parking lot and to the south is a residential multi-family building. Britton Middle School is to the west and a senior housing development is to the east. None of the parcels are located within a designated scenic view corridor or visible from a designated scenic highway.

Location 10 is an approximately 0.9-acre parcel located at 25 Pebbles Avenue (APN 726-41-065), which is northeast of the Monterey Road and Peebles Avenue intersection. The parcel is vacant with some of the parcel paved and the remaining part of the parcel consisting of grasses, shrubs, and trees. A chicken wire mesh fence outlines the perimeter of the parcel. To the north of the parcel is a Budget Inn motel with two rectangular buildings and a parking lot in-between the two buildings. To the east is a commercial building with associated storage buildings and to the south is a towing company and its associated parking lot. Monterey Road borders the western boundary of the parcel and further west is the Union Pacific rail line. The parcel is not located within a designated scenic view corridor or visible from a designated scenic highway.

Location 22 is an approximately 5.5-acre parcel located southwest of the Juan Hernandez Drive and Saint James Drive intersection. The parcel is vacant and undeveloped. Surrounding land uses include a single-family residential neighborhood to the north, vacant parcels to the east (these parcels are part of Location 22 and will be developed in the near future) and south, and commercial buildings to the west of Butterfield Boulevard. The parcel is not located within a designated scenic view corridor or visible from a designated scenic highway.

4.1.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?					
a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Aesthetics Conclusions

Aesthetic values are, by their nature, subjective. Opinions as to what constitutes a degradation of visual character would differ among individuals. One of the best available means for assessing what constitutes a visually acceptable standard for new buildings are the City's design standards and implementation of those standards through the City's Design Review process, which is established in Section 18.108.040 of the City's Municipal Code. The following discussion addresses the proposed changes to the visual setting of the Housing Element Update project locations and factors that are part of the community's assessment of the aesthetic values of a project's design, consistent with the assumptions in the Morgan Hill 2035 FEIR. Similar to the General Plan build-out evaluated in the Morgan Hill 2035 FEIR, the Housing Element Update would result in less than significant aesthetics impacts, as described below.

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista.
[Same Impact as Approved Project (Less than Significant Impact)]

Implementation of the Housing Element Update would facilitate new residential construction in order to meet the City's RHNA allocation. Residential development under the Housing Element Update would be on lands that are already developed, or on lands contiguous to urban uses and major roadways. As discussed in Section 4.1.1.2 Existing Conditions, while the General Plan does not designate official scenic vistas, the General Plan states that important scenic views in the City

¹⁰ Public views are those that are experienced from publicly accessible vantage points.

include views of the hillside and mountain areas. In particular, the General Plan recognizes El Toro Mountain as a landmark natural feature that exists in a rugged, undeveloped state. The General Plan also states that the slopes surrounding the City play a major role in shaping the City's character. The Morgan Hill 2035 FEIR concluded that with implementation of General Plan goals, policies, and actions (Goal NRE-1, Policy NRE-1.1, Goal NRE-2, Policy NRE-2.1, Policy NRE-2.2, Policy NRE-2.3, Policy NRE-2.4, Action NRE-2.A, Action NRE-2.B, Action NRE-2.E, Policy NRE-5.3, and Action NRE-5.B) that would protect scenic views and other scenic resources, impacts on scenic vistas would be less than significant. Residential development under the Housing Element Update would be designed consistent with these goals, policies, and actions in that none of the project locations are on or near El Toro Mountain or other hillside areas of the City. For these reasons, the Housing Element would not result in new or substantially more severe impacts to scenic vistas than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **[Same Impact as Approved Project (No Impact)]**

As discussed in Section 4.1.1.2 Existing Conditions, there are no designated scenic highways in Morgan Hill or its SOI. The Morgan Hill 2035 FEIR concluded that buildout under the General Plan (including the Housing Element) would have no impact to scenic resources within a state scenic highway. **[Same Impact as Approved Project (No Impact)]**

Impact AES-3: The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. **[Same Impact as Approved Project (Less than Significant Impact)]**

Development under the General Plan (including the Housing Element) would have a significant impact if it would substantially change the existing visual character in the vicinity such that the visual quality of those areas would be damaged. Undeveloped sites that are designated for development would be the locations with the greatest potential for a change in visual character. The Morgan Hill 2035 FEIR concluded that new development allowed by the General Plan would be designed consistent with General Plan policies that promote high-quality design and visual compatibility, as well as the design review requirements of the City's Residential Development Design and Development Standards (Policy CNF-8.1, Policy CNF-8.3, and Policy CNF-8.7). Adherence to these policies and standards would ensure that new development (including the Housing Element Update) is designed to be compatible with existing development and uses high-quality building materials and design techniques. Therefore, implementation of the Housing Element Update would not result in new or substantially more severe impacts to the existing visual character in that the Housing Element does not propose housing on any project locations that are not currently designated for housing under the Morgan Hill 2035 General Plan. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR found that significant light or glare impacts would result if new development would create new sources of light or glare that would adversely affect day or nighttime views. New lighting from new development allowed by the General Plan (including the Housing Element Update) would come mainly from commercial areas, safety lighting, building-mounted lights, illuminated signage, parking lot and streetlights, and traffic on major arterials. New glare would come mainly from building materials and parked cars. Future development allowed by the General Plan (including the Housing Element Update) would also incrementally increase glare due to the new building surfaces and parked cars.

The Morgan Hill 2035 FEIR concluded that future development (including the Housing Element Update) would be subject to the City's Residential Development Design and Development Standards. As part of this process, future development (including the Housing Element Update) would be reviewed for consistency with the objective standards identified in the City's Residential Development Design and Development Standards, which includes standards and guidelines regarding the appropriate use of lighting and avoidance of glare from lighting and other sources. Development would also be required to be consistent with the California Building Code standards for outdoor lighting, which are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. Adherence to these standards and guidelines would ensure that lighting is shielded to avoid glare and light spillage and incorporates technologies such as timers to avoid excessive lighting. For these reasons, in addition to the fact that the Housing Element does not propose housing on any parcels that are not currently designated for housing under the Morgan Hill 2035 General Plan, the Housing Element Update would not create a new source of substantial light or glare than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.¹¹ For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land constitute 'agricultural land' (Public Resources Code Section 21060.1).

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.¹²

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.¹³ Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.¹⁴

¹¹ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 19, 2022. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

¹² California Department of Conservation. "Williamson Act." <http://www.conservation.ca.gov/dlrp/lca>.

¹³ Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

¹⁴ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 19, 2022. <http://frap.fire.ca.gov/>.

Local

Division B29, Agriculture and Resource Management, Chapter 1, Agricultural Rights, Disclosure and Dispute Resolution

This County of Santa Clara code acknowledges that viable agricultural lands existing within the county and the code aims to protect agricultural resources since it is within the public interest to enhance and encourage agricultural operations. The Board of Supervisors of Santa Clara County found that residential and commercial developments adjacent to certain agricultural lands can lead to restrictions on agricultural operations, which is a detriment to the agricultural use. The code further states that no agricultural activity, operation, or facility shall become a nuisance if it was not considered a nuisance before. Therefore, this County code protects the continued operation of agricultural land as is without restriction.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to agriculture resources. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Agriculture and Forestry Resources

Policy	Description
CNF-4.3	Prerequisites for Urban Development. Consider land adjacent to the City as available for urban development only when it is included within the Urban Service Area and Urban Growth Boundary, can be developed in a manner that will be cost-effective to the City, and will be served by adequate public services and facilities.
CNF-7.1	County General Plan Policies. Promote the maintenance of current County General Plan policies encouraging low-density uses, including large lots and agriculture, for County projects adjacent to the UGB. Encourage the County to retain large minimum parcel sizes, and promote agricultural and open space uses on unincorporated lands.
CNF-7.4	Agricultural Land Use Conflicts. Work with Santa Clara County to minimize potential land use conflicts between urban uses within the UGB and rural lands adjacent to the growth boundary.
CNF-7.5	Inter-Jurisdictional Support for Agriculture. Coordinate measures to enhance the economic viability of agriculture in conjunction with other inter-jurisdictional planning in the South County.
CNF-11.7	Clustering of Residential Units. Encourage the clustering of residential units to provide open space and recreation areas, and to provide buffer areas between different land uses (e.g., industrial and residential).

Morgan Hill Agricultural Lands Preservation Program and Agricultural Mitigation Ordinance

The City of Morgan Hill has adopted an Agricultural Lands Preservation Program (Preservation Program) to encourage the preservation and enhancement of open space/agriculture outside of the City boundaries but within the City's Urban Growth Boundary (UGB) SOI, while identifying certain properties within the boundaries for mitigation and compatible development with sports, recreation, and leisure uses. The ordinance establishes CEQA mitigation procedures to mitigate the loss of agricultural lands under the jurisdiction of the City of Morgan Hill. Mitigation for the loss of farmland with a designated "soil quality" on the FMMP maps provides for payment of an agricultural

mitigation fee, acquisition of other agricultural land, or dedication of a permanent agricultural conservation easement on agricultural land and payment of a fee to cover ongoing stewardship and monitoring activities. Mitigation is required at a ratio of 1:1 (meaning one acre of perpetual farmland preservation for each acre of farmland development/conversion). Should a mitigation fee be paid, the City will combine those fees with open space fees to acquire easements near the City boundary.

4.2.1.2 *Existing Conditions*

Important Farmland

Table 4.2-1 below summarizes agricultural land within the Morgan Hill City limit and SOI. The majority of agricultural land in the City is classified as grazing land. Most of the prime farmland is located on the eastern side of the City, east of Highway 101.¹⁵

Table 4.2-1: Summary of Agricultural Lands within Morgan Hill SOI		
Farmland Classification	Within City Limit (Acres)	Total (Acres)
Prime Farmland	314	1,386
Farmland of Statewide Importance	22	196
Farmland of Local Importance	153	346
Unique Farmland	30	234
Grazing Land	1,265	7,686

Source: City of Morgan Hill. *Morgan Hill 2035 DEIR*. Page 4.2-11. January 2016.

Two of the Housing Element Update project locations are designated as Prime Farmland, refer to Table 4.2-2 below. Three of the Housing Element Update project locations are designated as Grazing land. The remainder of the project locations are either Urban and Built-up Land¹⁶ or Other Land.¹⁷

¹⁵ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Figure 4.2-1. January 2016.

¹⁶ Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

¹⁷ Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Table 4.2-2: Agricultural Land (Housing Element Project Locations)		
Housing Element Project Location	Farmland Classification	Acreage
Monterey-Lucky Shing Manzanita Park, Location 1	Grazing	5.83
Half-Dividend (Crosswinds), Location 11	Prime Farmland / Grazing	28.88
Cochrane - Toll Brothers (Phases 3 and 4), Location 12	Prime Farmland	54.42
Monterey-Morgan Hill Senior Housing, Location 17	Grazing	1.89
Llagas-Strolata Properties (Silvas), Location 19	Grazing	4.60

Source: California Department of Conservation. California Important Farmland Finder. Accessed April 19, 2022.
<https://maps.conservation.ca.gov/dlrf/ciff/>

Williamson Act Contracts

According to the Morgan Hill 2035 FEIR, there are a total of 1,703 acres of land that are under ongoing Williamson act contracts within the Morgan Hill City limits and SOI. None of the Housing Element project locations are located on a Williamson Act Parcels (ongoing contract or non-renewed).¹⁸

Forestry Resources

There are no forest or timber resources zoned in the City.¹⁹ Isolated woodlands that could fall under California Public Resource Code Section 12220(g) are scattered throughout Morgan Hill, according to CAL FIRE mapping data, with the woodlands primarily located near the Chesbro Reservoir.²⁰ Based on Figure 4.2-3 from the Morgan Hill 2035 FEIR, none of the Housing Element Update project locations contain isolated woodlands.²¹

¹⁸ County of Santa Clara. Williamson Act Properties. Accessed July 16, 2022.
<https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce>

¹⁹ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Page 4.2-11. January 2016.

²⁰ Ibid.

²¹ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Figure 4.2-3. January 2016

4.2.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in a loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Agriculture and Forestry Resources Conclusions

The Morgan Hill 2035 FEIR identified that implementation of the General Plan would result in conversion of 504 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Given that the only way to fully avoid agricultural impacts associated with General Plan buildup is to not allow development in such areas, mitigation is infeasible and the impact is significant and unavoidable, and the City Council adopted a statement of overriding considerations in approving the 2035 General Plan Update.

Impact AG-1:	The project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. [Same Impact as Approved Project (Significant and Unavoidable Impact)]
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As described in the Morgan Hill 2035 FEIR, 504 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted into non-agricultural uses. Policies CNF-7.1, CNF-7.4, and CNF-7.5 would serve to protect agricultural lands along with the City of Morgan Hill's Agricultural Lands Preservation Program and Agricultural Mitigation Ordinance. However, the impact would be significant and unavoidable because buildout of the General Plan would still lead to the conversion of agricultural lands into non-agricultural uses.

As shown in Table 4.2-2 above, two of the Housing Element Update project locations (Location 11 and 12) are designated as Prime Farmland. The two project locations would convert approximately 83.3 acres of Prime Farmland into residential development. Both of these sites (Location 11 and 12) have either undergone project-level environmental review or are currently conducting project-level environmental review. Even with individual project-level review and the application of available mitigation to compensate for the loss of farmland, the two opportunity locations would ultimately convert Prime Farmland to a non-agricultural use. The projects would be required to comply with the Preservation Program's mitigation measures as detailed in the Agricultural Mitigation Ordinance (Chapter 18.152 of the Municipal Code). Compliance with the City's Agricultural Mitigation Ordinance would reduce the project's impacts associated with conversion of Prime Farmland, but not to a less than significant level. There are no other feasible mitigation measures which could be implemented to reduce the loss of agricultural lands to a less than significant level, as CEQA case law affirms the principle that the loss of prime farmland is irreversible, and protection of other existing farmland does not fully offset the lost farmland, but rather prevents further loss. Therefore, the Housing Element Update would have a significant and unavoidable impact on parcels identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, consistent with the 2035 General Plan. For these reasons, the Housing Element Update would not result in new or more severe impacts than identified in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Significant and Unavoidable)]**

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. [Less Impact than Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR concluded that the proposed General Plan would conflict with a Williamson Act contract because one 16-acre parcel on Olive Avenue would be designated as Residential Detached Medium, which would conflict with the Williamson Act contract once the parcel is annexed. The loss of agricultural land would result in a significant and unavoidable impact.

As discussed in Section 4.2.1.2 Existing Conditions, none of the Housing Element Update project locations would not be located on parcels that are under a Williamson Act contract. Therefore, the Housing Element Update would result in a lesser impact than identified in the Morgan Hill 2035 FEIR. **[Less Impact than Approved Project (Less than Significant Impact)]**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. [Same Impact as Approved Project (No Impact)]
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The Morgan Hill Municipal Code does not have zoning districts for forestland or timberland; therefore, the Morgan Hill 2035 FEIR concluded that there would be no impacts. This same conclusion would apply to the Housing Element Update. **[Same Impact as Approved Project (No Impact)]**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. [Same Impact as Approved Project (Less than Significant Impact)]
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As described in Impact AG-3, the City of Morgan Hill does not have areas zoned forestland or timberland. However, the City does contain isolated woodlands that would be defined as forestland pursuant with Public Resources Code Section 12220(g) in the vicinity of the Chesbro Reservoir and along the eastern border the City boundaries near Anderson Reservoir. The Morgan Hill 2035 FEIR concluded that Policies CNF-7.1 and CNF-11.7 would reduce impacts related to forestry resources and impacts would be reduced to less than significant.

Residential development under the Housing Element Update would be designed consistent with these policies, which promote the development of low-density uses for projects adjacent to the UGB to retain open space and encourage residential units be clustered together to provide open space. The Housing Element project locations would also be constructed within the urban city limits and not result in the loss of forest land or the conversion of forest land to non-forest use. For these reasons, the Housing Element Update would not result in new or substantially more severe impacts to forestland than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. [Same Impact as Approved Project (Less than Significant Impact)]
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As discussed in the Morgan Hill 2035 FEIR, the buildup of the General Plan would not create incompatible urban uses adjacent to forestland, but buildup could result in potentially incompatible urban uses next to agriculture uses. The following General Plan policies would enforce the preservation of active agricultural lands: Policy CNF-7.1, Policy CNF-7.4, Policy CNF-7.5, and Policy CNF-11.7. Division B29, Agriculture and Resource Management, Chapter 1, Agricultural Rights, Disclosure and Dispute Resolution, of the Santa Clara County Code, described above in the Regulatory Setting, would also serve to protect agricultural resources by not allowing residential or commercial land uses, adjacent to agricultural lands, to restrict the agricultural operations or have the agriculture use deemed a nuisance if the agriculture use is in compliance with local regulations and was not considered a nuisance before the development of the residential or commercial land use. Therefore, the Morgan Hill 2035 FEIR concluded that impacts would be less than significant with implementation of the General Plan Policies and local code.

As discussed under Impact AG-1, the Housing Element Update would convert parcels designated Prime Farmland to non-agricultural use and would be required to incorporate policies and ordinances to offset impacts to Farmland, although those impacts would remain significant and unavoidable even with compliance. Aside from the physical conversion of land, the proposed Housing Element Update would not result in other changes in the existing environment which could result in the conversion of agricultural land or forest land. For these reasons, the Housing Element Update would not result in new or substantially more severe impacts due to the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.3 AIR QUALITY

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.²² Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	<ul style="list-style-type: none">Aggravation of respiratory and cardiovascular diseasesIrritation of eyesCardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	<ul style="list-style-type: none">Aggravation of respiratory illnessReduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	<ul style="list-style-type: none">Reduced lung function, especially in childrenAggravation of respiratory and cardiorespiratory diseasesIncreased cough and chest discomfortReduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	<ul style="list-style-type: none">CancerChronic eye, lung, or skin irritationNeurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x . These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

²² The area has attained both state and federal ambient air quality standards for CO. The Housing Element Update does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).²³ Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O₃, CO, SO_x, NO_x, and lead.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels

²³ California Air Resources Board. “Overview: Diesel Exhaust and Health.” Accessed May 25, 2022. <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.²⁴

Since the adoption of the Morgan Hill 2035 FEIR, BAAQMD adopted the 2017 Clean Air Plan. This is a revised Clean Air Plan that builds upon the 2010 Clean Air Plan.²⁵ For the purpose of this Addendum, the 2010 Clean Air Plan is used consistent with the Morgan Hill 2035 FEIR.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area.

²⁴ BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

²⁵ Since the publication of the Morgan Hill 2035 FEIR, BAAQMD adopted an updated version of the Clean Air Plan – 2017 Clean Air Plan. The 2017 Clean Air Plan is a multi-pollutant plan that builds upon the 2010 Clean Air Plans goals and control measures with a stronger emphasis on reducing GHG emissions in 2030 and 2050 to protect the climate. The adoption 2017 Clean Plan does not constitute itself as new information that requires a new analysis be prepared.

Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to air quality. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Air Quality

Policy	Description
NRE-10.2	State and Federal Regulation. Encourage effective regulation of mobile and stationary sources of air pollution and support state and federal regulations to improve automobile emissions controls.
NRE-10.3	Automobile Emissions. Encourage the use of and infrastructure for alternative fuel, hybrid, and electric vehicles. Encourage new and existing public and private development to include electric vehicle charging stations.
NRE-10.4	Reduced Automobile Use. To reduce air pollution the frequency and length of automobile trips and the amount of traffic congestion by controlling sprawl, promoting infill development, and encouraging mixed uses and higher density development near transit. Support the expansion and improvement of alternative modes of transportation. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that reduce vehicle trips.
NRE-11.1	TACs and Proposed Sensitive Uses. Require modeling for sensitive land uses, such as residential development, proposed near sources of pollution such as freeways and industrial uses. Require new residential development and projects categorized as sensitive receptors to incorporate effective mitigation measures into project designs or be located adequate distances from sources of toxic air contaminants (TACs) to avoid significant risk to health and safety.
NRE-11.2	TACs and Existing Sensitive Uses. Encourage the installation of appropriate air filtration mechanisms at existing schools, residences, and other sensitive receptors adversely affected by existing or proposed pollution sources.
BRE-11.3	Health Risks Assessments. For proposed development that emits toxic air contaminants, require project proponents to prepare health risk assessments in accordance with Bay Area Air Quality Management District procedures as part of environmental review and implement effective mitigation measures to reduce potential health risks to less-than-significant levels. Alternatively, require these projects to be located an adequate distance from residences and other sensitive receptors to avoid health risks. Consult with the Bay Area Air Quality Management District to identify stationary and mobile toxic air contaminant sources and determine the need for and requirements of a health risk assessment for proposed developments.
NRE-11.6	Vegetation Buffers. Encourage the use of pollution-absorbing trees and vegetation in buffer areas between substantial sources of toxic air contaminants and sensitive receptors.

Morgan Hill 2035 General Plan Policies: Air Quality

Policy	Description
NRE-12.1	Best Practices. Require that development projects implement best management practices to reduce air quality emissions associated with construction and operation of the project.
NRE-12.2	Conditions of Approvals. Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At a minimum, conditions shall conform to construction mitigation measures recommended in the current Bay Area Air Quality Management District CEQA Guidelines.
NRE-12.3	Control Measures. Require construction and demolition projects that have the potential to disturb asbestos (from soil or building materials) to comply with all the requirements of the California Air Resources Board's air toxics control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.
NRE-12.4	Grading. Require subdivision designs and site design planning to minimize grading and use landform grading in hillside areas.
NRE-13.1	Building Materials. Promote the use of building materials that maintain healthful indoor air quality in an effort to reduce irritation and exposure to toxins and allergens for building occupants.
NRE-13.2	Construction and Pre-Occupancy Practices. Encourage construction and pre-occupancy practices to improve air quality for new development upon occupancy of the structure.
NRE-14.1	New Odor Sources. For new, expanded, or modified facilities that are potential sources of objectionable odors require an analysis of possible odor impacts and the provision of odor minimization and control measures as mitigation.
NRE-14.2	Odors and Proposed Sensitive Uses. Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing or potential sources of odor. Determine the adequate separation distance based on the type, size, and operations of the facility
NRE-15.4	Sustainable Land Use. Promote land use patterns that reduce the number and length of motor vehicle trips.
NRE-15.6	Residential Near Transit. Encourage higher density residential and mixed-use development adjacent to commercial centers and transit corridors- the land along or within walking distance of a street served by transit.
NRE-15.10	Green Building. Promote green building practices in new development.
NRE-16.7	Renewable Energy. Encourage new and existing development to incorporate renewable energy generating features, like solar panels and solar hot water heaters.
NRE-16.9	Subdivision Design. In compliance with Section 66473.1 of the state Subdivision Map Act, promote subdivision design that provides for passive solar heating and natural cooling through the Development Review Committee subdivision review procedures.
TR-2.1	Multi-Modal System for All Users. A balanced multi-modal system offers viable choices for residents, employees, customers, visitors, and recreational users. Use smart growth and Sustainable Communities principles throughout the City to provide a balanced transportation system which assures access to all, and which integrates all appropriate modes of transportation into an effectively functioning system, including

Morgan Hill 2035 General Plan Policies: Air Quality

Policy	Description
	modes such as auto, ride sharing, public rail and bus transit, paratransit, bicycling, and walking.
TR-2.2	Integrated Land Use/Transportation Planning. Integrate planning for land use and transportation development by ensuring that the timing, amount, and location of urban development is consistent with the development of the transportation system capacity. Promote environmental objectives that supports smart growth and Sustainable Communities principles, such as safe and uncongested neighborhoods, a pedestrian-friendly vibrant downtown that emphasizes non-auto transportation modes, energy conservation, reduction of air and noise pollution, and the integrity of scenic and/or hillside areas.
TR-6.12	Bus Shelters from Private Development. Require developers to install bus shelters compatible with City architectural standards, where appropriate.
TR-9.1	Private Development Connections. Encourage adequate pedestrian access in all developments, with special emphasis on pedestrian connections in the downtown area, in shopping areas, and major work centers, including sidewalks in industrial areas in accordance with the Trails and Natural Resources Master Plan.
TR-9.10	Sidewalk Connectivity. Improve sidewalk connectivity by installing new sidewalks where they do not exist, consistent with the Trails and Natural Resources Master Plan.
TR-10.4	Air Quality and Transportation Demand Management. Investigate opportunities for preparing and implementing Air Quality and Transportation Demand Management Plans by employers and developers of new residential and non-residential developments.

4.3.1.3 *Existing Conditions*

The Bay Area is designated nonattainment-marginal for the 8-hour ozone National Ambient Air Quality Standard (NAAQS), nonattainment-moderate for the PM_{2.5} NAAQS, and maintenance for CO. The Bay Area is designated nonattainment for the O₃, PM_{2.5}, and PM₁₀ California Ambient Air Quality Standards (CAAQS). As part of an effort to attain and maintain ambient air quality standards for O₃, PM₁₀, and PM_{2.5}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O₃ precursor pollutants (ROG and NOx), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts.

Existing levels of ambient air quality and historical trends and projections in the vicinity of Morgan Hill are best documented by measurements made by the BAAQMD. The air quality monitoring station closest to Morgan Hill is the San Martin Murphy Avenue Monitoring Station; however, this station only monitors O₃. Based on data from the San Jose Jackson Street Monitoring Station for other criteria pollutants, the area regularly exceeds the state and federal O₃ standards and federal PM_{2.5} standard and occasionally exceeds the state PM₁₀ standard.²⁶

Land uses in the Project area generate criteria air pollutants from natural gas use for energy, heating and cooking, vehicle trips associated with each land use, and area sources such as landscaping equipment and consumer cleaning products.

²⁶ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Page 4.3-17. January 13, 2016.

4.3.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Air Quality Conclusions

The Morgan Hill 2035 FEIR found that the General Plan would not hinder BAAQMD's implementation of the 2010 Clean Air Plan because the General Plan policies support the control measures of the 2010 Clean Air Plan and the projected VMT is less than the population growth. The 2035 FEIR found that the General Plan would cause a substantial net increase in operational and construction-related criteria pollutant emissions that exceeds the BAAQMD regional significance thresholds. Even with implementation of General Plan policies, these impacts were found to be significant and unavoidable. The 2035 FEIR found that future projects proximity to major sources air pollution was consistent with the Bay Area Clean Air Plan, and no violations of carbon monoxide standards were expected from build-out of the General Plan. Impacts to future residents of the General Plan buildout from existing sources of TACs as well as impacts to nearby sensitive receptors from TACs were found to be less than significant.

Impact AIR-1:	The project would not conflict with or obstruct implementation of the applicable air quality plan. [Same Impact as Approved Project (No Impact)]
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The Morgan Hill 2035 FEIR concluded that buildout of the General Plan would not conflict with the 2010 Bay Area Clean Air Plan, which was the latest Clean Air Plan at the time the EIR was adopted. The General Plan goals, policies, and actions would be consistent with control measures from the 2010 Bay Area Clean Air Plan; therefore, not hindering BAAQMD from implementing the 2010 Bay Area Clean Air Plan. In addition, it was demonstrated that the projected VMT increase generated from future development of the General Plan would be less than the projected population increase. Daily VMT from the General Plan would increase at a lower rate of 38 percent compared to the proposed population growth of 51 percent.

Implementation of the Housing Element Update would also not conflict or hinder BAAQMD from implementing the 2010 Clean Air Plan since future developments would be subject to the goals, policies, and actions in the General Plan in addition to being required to implement the CALGreen and Building Energy Efficiency standards. Adherence to these standards and the General Plan, would ensure that the Housing Element Update is also consistent with the 2010 Bay Area Clean Air Plan.²⁷ The projected VMT and population growth from development under the Housing Element Update were also accounted for in the Morgan Hill 2035 FEIR. The Housing Element Update would not generate new daily VMT or population growth beyond what has been disclosed in the Morgan Hill 2035 FEIR. In addition, the VMT associated with future housing developments would be evaluated at a project-level as individual projects are submitted. For these reasons, the Housing Element Update would not create conflict or obstruct implementation of the applicable air quality plan as disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (No Impact)]**

Impact AIR-2:	The project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. [Same Impact as Approved Project (Significant and Unavoidable)]
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The Morgan Hill 2035 FEIR found that buildout of the General Plan would result in a cumulatively considerable net increase of criteria pollutants even with implementation of General Plan policies and actions that would reduce criteria air pollutants because emissions generated from the new development allowed by the General Plan would exceed the BAAQMD project-level thresholds for construction and operation. To reduce construction criteria pollutant impacts, Mitigation Measure AQ-2a-1 and Mitigation Measure AQ-2a-2 from the Morgan Hill FEIR would be required for all future development projects. Mitigation Measure AQ-2a-1 requires that all development projects implement BAAQMD basic construction mitigation measures to reduce fugitive dust emissions, and Mitigation Measure AQ-2a-2 requires that a technical air quality assessment evaluating construction air quality impacts be prepared and submitted to the City prior to issuance of construction permits. To further reduce operational criteria pollutant impacts, Mitigation Measures AQ-2b, like Mitigation

²⁷ Since the publication of the Morgan Hill 2035 FEIR, BAAQMD adopted an updated version of the Clean Air Plan – 2017 Clean Air Plan. The 2017 Clean Air Plan is a multi-pollutant plan that builds upon the 2010 Clean Air Plans goals and control measures with a stronger emphasis on reducing GHG emissions in 2030 and 2050 to protect the climate. The adoption 2017 Clean Plan does not constitute itself as new information that requires a new analysis be prepared.

Measures AQ-2a-2, requires that development projects prepare a technical air quality assessment evaluating operational air quality impacts prior to issuance of construction permits. However, even with these mitigation measures, the Morgan Hill 2035 FEIR concluded that impacts would be significant and unavoidable due to the programmatic nature of the proposed General Plan and the overall scale of development allowed under the General Plan, including substantial non-residential development, including employment and commercial uses.

Residential development under the Housing Element Update would be required to implement Mitigation Measures AQ-2a-1, AQ-2a-2, and AQ-2b described above, however impacts would remain significant and unavoidable impact because the Housing Element includes adequate housing project locations for 2,212 units, a less-than-significant finding can only be determined on an individual, project-level basis when specific characteristics of the development are available. Therefore, consistent with the Morgan Hill 2035 FEIR, the Housing Element Update would result in a cumulatively considerable net increase of criteria pollutant for which the region is non-attainment. **[Same Impact as Approved Project (Significant and Unavoidable)]**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **[Same Impact as Approved Project (Less than Significant Impact)]**

CO Hotspots

The Morgan Hill 2035 FEIR found that new development allowed by the General Plan would not create CO hotspots since the General Plan would be consistent with the Santa Clara Valley Transportation Authority's (VTA) congestion management plan through the implementation of General Plan policies and actions (Policy TR-2.1, Policy TR-2.2, Policy TR-6.1, Policy TR-6.3, Policy TR-6.4, Policy TR-6.5, Policy TR-6.6, Policy TR-6.12, Action TR-6.D, Policy TR-7.1, Policy TR-8.2, Policy TR-8.3, Policy TR-8.4, Policy TR-8.10, Policy TR-8.11, Policy TR-8.12, Policy TR-9.1, Policy TR-9.10, and Policy TR-10.4). These policies would encourage bicycle, pedestrian, and transit use to tie land use and transportation.

Residential development under the Housing Element Update would be designed consistent with these goals, policies, and actions. For these reasons, the Housing Element Update would not result in new or substantially more severe impacts regarding CO hotspots than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Toxic Air Contaminants

For TACs, the Morgan Hill 2035 FEIR concluded that specific industrial and commercial developments allowed under the General Plan, such as chemical processing facilities and gas stations, would be stationary sources that emit TACs. However, these stationary sources are overseen by BAAQMD under Regulation 2, Rule 2, New Source Review, and Rule 5, New Source Review of Toxic Air Contaminants. Sources of TAC that are not controlled by BAAQMD through a permit process are mobile sources, such as trucks and off-road equipment that emit DPM.

The Housing Element Update would facilitate the construction of new residential development. The Morgan Hill 2035 FEIR does not consider residential land uses to be sources of operational TAC,

unlike industrial land uses, chemical processing facilities, and gas stations. Therefore, it is unlikely that the residential developments would expose sensitive receptors to TACs when operating. However, construction of these residential developments would involve the use of heavy-duty construction equipment and trucks for hauling materials and traveling to the site. These construction activities would emit TAC, such as diesel particulate matter, that could expose nearby sensitive receptors to substantial pollutant concentrations. General Plan Policy NRE-11.3 would require that a health risk assessment be prepared to reduce potential risks to less-than-significant levels or be located an adequate distance from sensitive land uses. Therefore, operational TAC impacts from the implementation of the Housing Element Update would result in lesser impacts than disclosed in the Morgan Hill 2035 FEIR. **[Less Impact than Approved Project (Less than Significant Impact)]**

Impact AIR-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded the buildup of the General Plan would not result in objectionable odor impacts because Policy NRE-14.1 and Policy NRE-14.2 would minimize new odor sources and siting sensitive land uses in proximity to odors, respectively.

The Housing Element Update would facilitate the construction of new residential development, which are not land uses that BAAQMD associates with odors or potential sources of odors. In addition, General Plan Policy NRE-14.1 has ensured that the Housing Element Update project locations are located at an adequate distance from potential sources of odor. Therefore, the Housing Element Update would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.3.3 Non-CEQA Effects

Pursuant to *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (*BIA v. BAAQMD*), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the Morgan Hill 2035 General Plan has policies that address existing air quality conditions affecting a proposed project.

As described in the Morgan Hill 2035 FEIR, there are stationary sources (e.g., emergency backup generators permitted by BAAQMD) and mobile sources (e.g., roadways with volumes over 10,000 average daily traffic) within or near the City of Morgan Hill. Sensitive land uses, including residences, could be located within proximity to these sources and then be exposed to potentially substantial pollutant concentrations. Policies and actions from the General Plan would minimize impacts (Policy NRE-11.1, Policy NRE-11.6, Policy NRE-13.1, Policy NRE-13.2, Action NRE-13.A, and Action NRE-13.B) by requiring a refined site-specific health risk for sensitive land uses and promoting design measures, such as indoor filtration and vegetation buffers, to improve indoor air quality for future receptors, such as residences covered under the 2023-2031 Housing Element. Additionally, Mitigation Measure AQ-4b would be required to reduce impacts to less than significant by requiring a refined health risk assessment be prepared for proposed sensitive land use projects.

Future residential development under the Housing Element Update would be considered sensitive land uses. Consistent with Policy NRE-11.1 and Mitigation Measure AQ-4b, future residential developments would undergo individual environmental review and be required to prepare a health risk assessment, where warranted based on a given site's distance to stationary and/or mobile TAC sources. Therefore, the risks and hazards associated with existing sources of TAC upon the future sensitive land uses would be reduced to acceptable levels consistent with BAAQMD guidelines.

4.4 BIOLOGICAL RESOURCES

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.²⁸ Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

²⁸ United States Department of the Interior. “Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.” Accessed April 19, 2022. <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to biological resources. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Biological Resources

Policy	Description
NRE-1.2	Large Open Space Areas. Work with the County, the Open Space Authority, appropriate conservancy organizations and land trusts, and property owners to preserve large open space areas, such as agricultural lands and outdoor recreation areas, to conserve natural resources and retain the City's unique identity.
NRE-1.3	Designated Open Space. Maintain land designated as "Open Space" on the Morgan Hill General Plan Land Use Map (Figure CNF-3).
NRE-1.4	South County Open Space. Preserve and maintain the wide variety of open spaces in the South County; including greenbelt areas, parks, and agricultural uses. (South County Joint Area Plan 16.00)
NRE-1.9	Poppy Jasper. Preserve Poppy Jasper as a natural resource unique to Morgan Hill.
NRE-1.10	Wetland Delineation and Mitigation. Require wetland delineation and mitigation as part of the environmental review of future development.
NRE-1.11	Wetlands Enhancement. Encourage enhancement of sensitive wetlands as part of future development.
NRE-5.1	Reclamation of Streams and Riparian Areas. Encourage reclamation of degraded streams and riparian areas.
NRE-5.2	Other Agencies and Environmental Review. Coordinate with jurisdictional agencies, as required, as part of the environmental review process for development projects.
NRE-5.3	Natural State of Streamside and Riparian Areas. Retain natural streamside and riparian areas in their natural state in order to preserve their value as percolation and

Morgan Hill 2035 General Plan Policies: Biological Resources

Policy	Description
	recharge areas, natural habitat, scenic resources, and recreation corridors, and to stabilize banks. (South County Joint Area Plan 15.08).
NRE-5.4	Development Impacts in Riparian Areas. Consider development impacts upon wildlife in riparian areas and mitigate those environmental impacts.
NRE-5.5	Flood Control Projects. Where flood control projects are needed to protect existing development, minimize disruption of streams and riparian systems, maintaining slow flow and stable banks through design and other appropriate mitigation measures. (South County Joint Area Plan 15.08).
NRE-5.6	Stream Channel Protection. Protect existing stream channels and riparian vegetation by requiring buffering or landscaped setbacks and storm runoff interception as specified in Table NRE-1 and consistent with the Santa Clara Valley Habitat Plan.
NRE-5.8	Creeks Access. Access to creeks should be of sufficient width to accommodate trails, flood control access, and protection of riparian habitat. (South County Joint Area Plan 16.11).
NRE-6.1	Natural State of Habitat. Preserve all fish and wildlife habitats in their natural state whenever possible. Consider development impacts upon wildlife and utilize actions to mitigate those environmental impacts.
NRE-6.2	Habitat Conservation Plan. Support the implementation of the Santa Clara Valley Habitat Plan to protect wildlife, rare and endangered plants and animals, and sensitive habitats from loss and destruction.
NRE-6.3	Urban Expansion Impacts. Minimize impacts upon wildlife when considering annexations, urban service area extensions, and other governmental actions that permit urban development of previously undeveloped property.
NRE-6.4	Tree Preservation and Protection. Preserve and protect mature, healthy trees whenever feasible, particularly native trees, historically significant trees, and other trees which are of significant size or of significant aesthetic value to the immediate vicinity or to the community as a whole.

City of Morgan Hill Tree Removal Controls

The City of Morgan Hill maintains the urban natural landscape partly by promoting the health, safety, and welfare of the City by controlling the removal of significant sized trees (Municipal Code 12.32.020, G.). According to the City of Morgan Hill Tree Removal Controls, a significant tree is considered to be a tree with a single stem or trunk of a circumference of 40 inches (or diameter of 12.7 inches) or more for nonindigenous species and a circumference of 18 inches (or diameter of 5.7 inches) or more for indigenous species measured at four and one-half feet vertically above the ground. Indigenous species to Morgan Hill include oak (all types), California bay, madrone, sycamore, and alder trees.

“Street trees” are also protected and defined as a tree, of any size, situated within the public street right-of-way or publicly accessible private street (e.g., trees within a landscape park strip), or within five feet of publicly accessible sidewalk adjacent to a public or private street in the case of a street without a landscape park strip.

A “community of trees,” which is a group of trees of any size which are ecologically or aesthetically related to each other such that loss of several of them would cause a significant ecological, aesthetic, or environmental impact in the immediate area, are protected under the City’s ordinance.

In addition, the Tree Removal Controls specify that all commercial tree farms, nonindigenous tree species in residential zones, and orchards (including individual fruit trees) are exempted from the definition of significant tree.

City of Morgan Hill Burrowing Owl Habitat Mitigation Plan

Since 2003, the City of Morgan Hill has implemented a citywide program (Burrowing Owl Habitat Mitigation Plan) to evaluate and mitigate impacts to burrowing owls and potential burrowing owl habitat that could result from development activities within the City limits. Under the Burrowing Owl Habitat Mitigation Plan, the City requires pre-construction owl surveys to be completed in areas of potentially suitable habitat (generally any grassland and/or mixed herbaceous vegetation below 600 feet above mean sea level) within 30 days of the onset of construction.

4.4.1.2 *Existing Conditions*

Natural Communities

There are six natural communities and two non-natural communities within the Morgan Hill SOI. The natural communities are primarily located outside the City limits. Table 4.4-1 summarizes the natural communities within the SOI and the total acreage of each community.

Table 4.4-1: Summary of Natural Communities within Morgan Hill SOI

Natural Communities	Total (Acres)
Grassland	2,518
Oak Woodland	3,221
Chaparral and Northern Coastal Scrub	546
Riparian Forest and Scrub	236
Wetland	13
Open Water	181

Source: City of Morgan Hill. *Morgan Hill 2035 EIR*. Pages 4.4-10-4.4-11. January 2016.

All the Housing Element Update project locations are located in the urban developed city limits of Morgan Hill.

Sensitive Natural Communities

The CDFW considers the following communities located in the SOI as sensitive natural communities due to their valuable plant and wildlife diversity: serpentine bunchgrass grassland, serpentine rock outcrop/barren, serpentine seep, mixed serpentine chaparral, valley oak woodland, blue oak woodland, coastal and valley freshwater marsh, and vernal pools.²⁹ None of the Housing Element Update project locations would overlap with the sensitive natural communities identified in the Morgan Hill SOI. The serpentine bunchgrass grassland is a special-status habitat.

Aquatic Habitats

The following riverine habitats are present within the Morgan Hill SOI: Cold Steelhead Habitat, Warm Potential Trout/Steelhead Habitat, Warm Native Habitat, Mixed Native and Introduced Habitat, and Fish-Scare Habitat. These habitat types support a variety of fish and amphibian species, and the habitats are located in the Llagas Creek. None of the Housing Element Update project locations are near or overlapping with the Llagas Creek.

Special-Status Species

As described in the Morgan Hill 2035 FEIR, there are special-status plant and wildlife species recorded in the Morgan Hill SOI. Table 4.4-2 lists the plant and wildlife species along with their status on the federal and state Endangered Species Lists and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants.

Table 4.4-2: Summary of Special-Status Species within Morgan Hill SOI

Special-Status Plants		
Common Name	Scientific Name	Status (Federal List/Status List/CNPS Rank)
Arcuate bush-mallow	<i>Malacothamnus arcuatus</i>	None/None/1B.2
Coyote ceanothus	<i>Ceanothus ferrisiae</i>	Endangered/None/1B.1
Hall's bush-mallow	<i>Malacothamnus hallii</i>	None/None/1B.2
Most beautiful jewel-flower	<i>Malacothamnus hallii</i>	None/None/1B.2
Mt. Hamilton fountain thistle	<i>Cirsium fontinale</i> var. <i>campyon</i>	None/None/1B.2
San Francisco collinsia	<i>Collinsia multicolor</i>	None/None/1B.2
Santa Clara Valley dudleya	<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	Endangered/None/1B.1

²⁹ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Page 4.4-12. January 2016.

Smooth lessingia	<i>Lessingia micradenia</i> var. <i>glabrata</i>	None/None/1B.2
Woodland woollythreads	<i>Monolopia gracilens</i>	None/None/1B.2
Special-Status Wildlife		
Amphibians/Reptiles		
California tiger salamander	<i>Ambydstoma californiense</i>	Threatened/Threatened/ Special Concern
Western pond turtle	<i>Emys marmorata</i>	None/None/Special Concern
California red-legged frog	<i>Rana draytonii</i>	Threatened/None/Special Concern
Birds		
Burrowing owl	<i>Athene cunicularia</i>	None/None/Special Concern
Insects		
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	Threatened/None/Not Applicable
Opler's longhorn moth	<i>Adela oplerella</i>	None/None/Not Applicable
Hom's micro-blind harvestman	<i>Microcina homi</i>	None/None/Not Applicable
Source: City of Morgan Hill. Morgan Hill 2035 DEIR. Tables 4.4-1 and 4.4-2. January 2016.		

Habitats supporting these special status species are absent from the Housing Element project locations. Housing Element Update project locations (Location 1, 7, 8, 9, 10, 13, 14, 15) in proximity to Monterey Road are within the buffer zone for California tiger salamander, a special-status wildlife species. In addition, a portion of a Housing Element project location (Location 12) is within the buffer zone for woodland woollythreads, a special-status plant species.

Housing Element Update Project Locations

As described in Section 4.1 Aesthetics, there are a total of 31 Housing Element Update project locations with four of the locations pending entitlement, nine of the sites have no project associated with the parcel, and the remaining 18 of the project locations are in the process of being entitled. The project locations that are entitled have already undergone a separate project-level analysis pursuant to the CEQA Guidelines; therefore, Locations 1, 2 (one of the three parcels [Project Number SR2018-0020]), 4, 5, 7, 8, 9, 12, 13, 14, 15 (all three parcels are entitled), 16, 17, 19, 20, and 21 are not

discussed further. All the project locations are within the city boundaries and in proximity to existing urban development.

Pending Entitlement

The following Housing Element Update project locations are pending entitlement: Locations 10, 11, 18, and 22. Each project location is discussed individually below.

Location 10 is an approximately 4.6-acre site that includes APNs 726-42-002 (19380 Monterey Road) and 726-42-003 (19400 Monterey Road), which are located adjacent to Monterey Road and southeast of the Monterey Road and Burnett Avenue intersection. The parcels are currently commercial developments for the selling, renting, and servicing of family recreational vehicles. The parcels for Location 10 consistent of parking lots for storage of vehicles and temporary garage buildings. The parcels are within natural communities designated developed, there are no sensitive natural communities, and there are no fish habitat. However, Location 10 is within the buffer boundaries for California Tiger Salamander, a special status species.

Location 11 is an approximately 28.9-acre undeveloped site that includes APNs 728-30-001, 728-30-002, 728-30-003, and 728-30-004, which are located at the intersection of Half Road and Mission View Drive. The parcels are surrounded by developed and undeveloped parcels of land. The parcels are within natural communities designated irrigated agriculture, there are no sensitive natural communities, and there are no fish habitat. Location 11 is also not within areas with identified special-status species.

Location 18 is an approximately 1.1-acre site that includes APN 767-18-046 and is located north of Edes Street and west of West Little Llagas Creek trail. The parcel is undeveloped and located in between commercial uses. The parcel is within natural communities designated developed, there are no sensitive natural communities, and there are no fish habitat. Location 18 is also not within areas with identified special-status species.

Location 22 is an approximately 9.5-acre site that includes APN 817-09-041 and is located west of Highway 101 and southeast of the Juan Hernandez Drive and Barrett Avenue intersection. The parcel is flat and mostly covered with non-native grasses with several trees located on the northern portion of the site and along the west property line near the existing single-story medical office buildings. The parcel is a within natural community designated irrigated agriculture, there are no sensitive natural communities, and there are no fish habitat. Location 22 is also not within an area with identified special-status species.

No Project Locations

The following Housing Element Update project locations are not yet entitled and there are no pending projects associated with the parcels: Locations 2, 3, 6, 10, and 22, however each is planned for housing under the current General Plan. Each project location is discussed individually below.

Location 2 consists of APNs 726-02-012, 726-02-016, which equate to approximately 7.1-ares. The parcels are vacant and undeveloped parcels located northwest of the East Dunne Avenue and Walnut Grove Drive intersections. The parcels are flat with several trees planted throughout APN 726-02-

012 and ruderal vegetation through both APNs. The parcels are within natural communities designated developed and irrigated agriculture, there are no sensitive natural communities, and there are no fish habitat. Location 2 is also not within areas with identified special-status species.

Location 3 is a 3.4-acre site located at 17364 Walnut Grove Drive (APN 726-04-021) west of Highway 101 and east of Walnut Grove Drive. The parcel is vacant and undeveloped with only ruderal vegetation and trees on-site. The parcel is within a natural community designated developed, there are no sensitive natural communities, and there are no fish habitat. Location 3 is also not within areas with identified special-status species.

Location 6 consists of APNs 726-23-018 (95 East Main Avenue), 726-23-019, and 726-23-020 that total approximately 4.3-acres. APNs 726-23-018 and 726-23-019 are adjacent parcels located northeast of the Main Avenue and McLaughlin Avenue intersection. The existing uses on these parcels include a single-story construction equipment rental store (95 East Main Avenue) with parking lots and the other parcel is a private parking lot and storage area. APN 726-23-020 is a separate L-shaped parcel located southwest of the Monterey Road and Central Avenue intersections. It is a vacant, undeveloped parcel with ruderal vegetation surrounded by commercial uses. The parcels are within natural communities designated developed, there are no sensitive natural communities, and there are no fish habitat. Location 6 is also not within areas with identified special-status species.

Location 10 is an approximately 0.9-acre parcel located at 25 Pebbles Avenue (APN 726-41-065), which is northeast of the Monterey Road and Peebles Avenue intersection. The parcel is vacant with some of the parcel paved and the remaining part of the parcel consisting of grasses, shrubs, and trees. A chicken wire mesh fence outlines the perimeter of the parcel. The parcel is within a natural community designated developed, there are no sensitive natural communities, and there are no fish habitat. However, Location 10 is within a buffer area where California Tiger Salamander have been identified.

Location 22 is an approximately 5.5-acre parcel that includes APN 817-09-055 located southwest of the Juan Hernandez Drive and Saint James Drive intersection. The site is vacant and undeveloped. The site is within natural community designated irrigated agriculture, there are no sensitive natural communities, and there are no fish habitat. Location 22 is also not within an area with identified special-status species.

4.4.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Biological Resources Conclusions

The Morgan Hill 2035 FEIR found that buildup of the General Plan would not result in significant impacts to biological resources. Implementation of the General Plan would not have adverse effects on special status species, riparian habitat, or federally protected wetlands. Construction of the future development under the General Plan would not obstruct or interfere with wildlife corridors or movement of wildlife. The implementation of the General Plan would also not conflict with local policies, ordinances, or the provisions of an adopted habitat conservation Plan. Adherence to local regulations and General Plan policies would ensure impacts would be less than significant or no impacts would occur.

Impact BIO-1:	The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. [Same Impact as Approved Project (Less than Significant Impact)]
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As described in the Morgan Hill 2035 FEIR, a majority of the General Plan buildup would occur in urbanized areas where special-status species are not expected to occur. However, there are nine special-status plant species, seven special-status wildlife species, and one special-status habitat identified within the General Plan area. Impacts to special-status species would be reduced due through compliance with existing regulations (e.g., California Endangered Species Acts, MBTA, Fish and Game Code, California Native Protection Act, and Municipal Code Sections 8.80, 12.32, 18.08, and 18.69). In addition, the General Plan includes several goals, policies, and actions that would further reduce impacts to special-status species (e.g., Goal NRE-1, Policy NRE-1.2, Policy NRE-1.3, Policy NRE-1.4, Policy NRE-1.9, Goal NRE-5, Policy NRE-5.2, Goal NRE-6, Policy NRE-6.1, Policy NRE-6.2, Policy NRE-6.3, and Policy NRE-6.4).

As discussed in Section 4.4.1.2 Existing Conditions, several of the Housing Element Update project locations (Location 1, 7, 8, 9, 10, 13, 14, 15) are located in areas where special-status species have been identified. are in proximity to Monterey Road are located in a buffer zone where California tiger salamander have been documented. In addition, a portion of a Housing Element project location (Location 12) is within the buffer zone for woodland woollythreads. Future residential developments located in areas where special-status species have been identified would be required to comply with the Santa Clara Valley Habitat Plan, which includes submitting a Habitat Plan application package that identifies covered species and the applicable minimization requirements that will be implemented to reduce impacts. The Santa Clara Valley Habitat Plan also has development fees that projects are required to pay to further mitigate impacts. The total fees would be dependent on the land cover of the project site and would require surveys to identify species on-site. The residential developments proposed under the Morgan Hill Housing Element Update would also undergo individual project-specific environmental review pursuant with CEQA, and this process would identify mitigation measures to reduce impacts to special-status species. Additionally, consistent with the Morgan Hill 2035 FEIR, implementation of the above-mentioned General Plan goals, policies, and actions would ensure that impacts to special-status species are less than significant. For these reasons, and because the Housing Element Update does not propose or require the re-designation of any land not currently designated for housing, the Housing Element Update would not result in new or substantially more severe impacts on any species identified as a candidate, sensitive, or special

status species than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact BIO-2: The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that the majority of the General Plan buildout would be constructed in urbanized areas. The potential for substantial adverse effects on habitat and sensitive natural communities in developed areas is generally very remote in comparison to undeveloped lands with natural habitat that contain sensitive natural communities. To reduce impacts to less than significant, the following General Plans goals, policies, and actions would be implemented by future development, along with applicable federal, state, regional, and local regulations, and compliance with the Santa Clara Valley Habitat Plan: Goal NRE-6, Policy NRE-6.1, Policy NRE-6.2, Policy NRE-6.3, Goal NRE-1, Policy NRE-1.3, Policy NRE-1.4, Goal NRE-5, Policy NRE-5.1, Policy NRE-5.2, Policy-NRE-5.3, Policy-5.4, Policy-NRE-5.5, Policy NRE-5.6, Policy NRE-5.8, Action NRE-5.8, and Action NRE-5.C.

As discussed in Section 4.4.1.2, none of the Housing Element Update project locations contain riparian habitats or other sensitive natural communities. Consistent with the Morgan Hill 2035 FEIR, implementation of the above-mentioned General Plan goals, policies, actions, and Santa Clara Valley Habitat Plan, would ensure that impacts to riparian habitats and sensitive natural communities are less than significant. For these reasons, the Housing Element Update would not result in new or substantially more severe impacts on any riparian habitat or other sensitive natural community than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact BIO-3: The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **[Less Impact than Approved Project (No Impact)]**

The Morgan Hill 2035 FEIR concluded that impacts to state or federally protected wetlands would be less than significant because wetlands within the General Plan area are primarily located outside the urbanized areas where development would occur, and there are goals, policies, and actions in addition to existing regulation (i.e., Clean Water Act) to reduce impacts. The applicable General Plan goals, policies, and actions are as follows: Goal NRE-1, Policy NRE-1.10, Policy NRE-1.11, Goal NRE-5, Policy NRE-5.2, Policy NRE-5.4, Goal NRE-6, Policy NRE-6.1, Policy NRE-6.2, and Policy NRE-6.3.

As discussed in Section 4.4.1.2, none of the Housing Element Update project locations are in proximity to wetlands. All of the project locations are within the urbanized area limits of the City. There would be no impact on state or federally protected wetlands. Therefore, the Housing Element Update would have a lesser impact than disclosed in the Morgan Hill 2035 FEIR. **[Less Impact than Approved Project (No Impact)]**

Impact BIO-4:	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. [Less Impact than Approved Project (No Impact)]
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New development under the General Plan (including future housing on the Housing Element project locations) would have a significant impact if future development would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Future development located within the urbanized area City limits have minimal potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species. The Morgan Hill 2035 FEIR concluded that new development allowed by the General Plan would comply with General Plan policies (Goal NRE-1, Goal NRE-5, Policy NRE-5.1, Policy NRE-5.2, Policy NRE-5.3, Policy NRE-5.4, Policy NRE-5.5, Policy NRE-5.6, Policy NRE-5.8, Action NRE-5.B, Action-NRE-5.C, Goal NRE-6, Policy NRE-6.1, Policy NRE-6.3) that further minimize potential impacts to wildlife corridors, as well as compliances with existing regulations (Santa Clara Valley Habitat Plan, Morgan Hill Municipal Code Chapter 18.28, Morgan Hill Municipal Code Chapter 18.132). Impacts would be less than significant with compliance with the existing regulations and policies.

The Housing Element Update project locations are within the urbanized city limits of Morgan Hill where there are no wildlife corridors. As a result, future development of the Housing Element Updates project locations would not interfere or impede wildlife movement or wildlife corridors. Therefore, implementation of the Housing Element Update would have a lesser impact than disclosed in the Morgan Hill 2035 FEIR. **[Less Impact than Approved Project (No Impact)]**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. [Same Impact as Approved Project (Less than Significant Impact)]
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As determined in the Morgan Hill 2035 FEIR, future developments under the General Plan (including the Housing Element Update) would not conflict with local policies or ordinances protecting biological resources since all development would be subject to the existing ordinances (City of Morgan Hill Municipal Code Chapter 12.32, Santa Clara Valley Habitat Conservation Plan, Morgan Hill Burrowing Owl Mitigation Plan).

Future residential development facilitated by the Housing Element Update may require tree removal. The City's Municipal Code (Chapter 12.32) requires acquisition of a tree removal permit for the removal of any significant trees from the Community Development Department. The permit would be reviewed and approved by the Community Development Director based on the information provided, a site inspection, and the criteria contained in Section 12.32.070 of the Municipal Code, including suitable replacement planting. With adherence to existing regulations, General Plan policies, and the City's Municipal Code, the Housing Element Update would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. [Same Impact as Approved Project (Less than Significant Impact)]
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The City of Morgan Hill adopted the Santa Clara Valley Habitat Plan (Habitat Plan) in 2012 and incorporated the Habitat Plan into the City of Morgan Hill Municipal Code as Chapter 18.132.020.³⁰ Future developments under the General Plan (including the Housing Element Update) are required to pay mitigation fees to the City and implement applicable mitigation measures identified in Chapter 6 of the Habitat Plan. As a result, the Morgan Hill 2035 FEIR concluded that future buildout of the General Plan would not conflict with the goals of the Habitat Plan. Future development under the Housing Element Update would be required to pay mitigation fees and implement applicable mitigation measures, as described above. Therefore, the Housing Element Update would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

³⁰ Note the Morgan Hill 2035 FEIR referenced the chapter as Chapter 18.69. The chapter numbering has changed since the publication of the Morgan Hill 2035 FEIR.

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA, as NRHP-listed properties are automatically eligible for listing in the California Register of Historical Resources, discussed below.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.³¹

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource’s eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

³¹ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” Accessed June 9, 2022.

<http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Regional and Local

Santa Clara County Heritage Resource Inventory

The Santa Clara County Heritage Resource Inventory compiles historical landmarks throughout the County and sets forth guidelines for their treatment and evaluation. Properties listed in the inventory located on unincorporated property are subject to a demolition review process by the Historical Heritage Commission (HHC) and the Board of Supervisors. The Heritage Resource Inventory was last updated in 2012.³²

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to cultural resources. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Cultural Resources

Policy	Description
HC-8.1	Identify and Protect Resources. Identify and protect heritage resources from loss and destruction. (South County Joint Area Plan 15.09)
HC-8.2	Historic Structures. Encourage the preservation and rehabilitation of the City's historic structures.

³² County of Santa Clara – Department of Planning and Development. *Historic Context Statement*. December 2004. Revised February 2012.

Morgan Hill 2035 General Plan Policies: Cultural Resources

Policy	Description
HC-8.3	Demolition. Prior to approving demolition or alteration of historically significant buildings, evaluate alternatives, including structural preservation, relocation, or other mitigation, and demonstrate that financing has been secured for replacement use.
HC-8.4	Tribal Consultation. Consult with Native American tribes that have ancestral ties to Morgan Hill regarding proposed new development projects and land use policy changes.
HC-8.5	Mitigation. Require that if cultural resources, including tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

Morgan Hill Historic Context Statement

The City's Historic Context Statement creates a framework against which to objectively qualify a property's significance in relation to larger historic themes and events. The Historic Context Statement includes a historical inventory and historical maps which recognize existing historic resources in the city. Historical evaluation of a subject property should use the context statement as a tool for understanding where a property's significance lies within the City's historical timeline. The City determines historical significance and eligibility for inclusion in the historical inventory based on the California Register criteria.³³

Morgan Hill Municipal Code Chapter 18.60

This chapter applies to potentially significant, significant, and designated historical resources within Morgan Hill. This code safeguards and preserve historical resources that reflect the City's architectural, artistic, cultural, engineering, aesthetic, historical, political, social and other heritage. Measures include site-specific surveys and/or permits if historical resources would be potentially altered or demolished.

4.5.1.2 *Existing Conditions*

Archaeological Resources

According to the Morgan Hill 2035 FEIR, numerous prehistoric sites with shell midden components, including human burials, have been identified in the City. This finding indicates there is potential for additional undiscovered archeological resources in the City. According to the City's archaeological sensitivity map (2000), the following Housing Element Update project locations are located in archaeologically sensitive areas: 1, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, and 19.

Historic Resources

Table 4.5-1 of the Morgan Hill 2035 FEIR summarizes properties that are listed on the Santa Clara County Historic Resources inventory, the National Register, and properties recognized by the City of Morgan Hill. There are no historic properties located on any of the Housing Element Update project locations.³⁴

³³ City of Morgan Hill. Municipal Code Chapter 18.60 – Historic Resources.

³⁴ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Table 4.5-1. January 2016.

4.5.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Cultural Resources

The Morgan Hill 2035 FEIR found that General Plan buildout would increase residential, commercial, and industrial developments, which would result in increased ground-disturbances activities that could lead to the unexpected discovery of cultural resources. However, it was determined that impacts to historical and archaeological resources would be less than significant because each individual development would undergo project-specific environmental review prior to the commencement of construction. The site-specific environmental review along with compliance with the Morgan Hill Municipal Code Chapter 18.60 would ensure that unexpected discoveries of cultural resources are handled appropriately by qualified professionals. The developments proposed under the General Plan may also potentially uncover human remains but impacts would be less than significant due to adherence to California Health and Safety Code Section 7050.5, PRC section 5097.98, and CCR Section 15064.5 Section (CEQA), which establish a protocol for how human remains must be handled. Therefore, the Morgan Hill 2035 FEIR found impacts related to cultural resources would be less than significant.

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **[Same Impact as Approved Project (Less than Significant Impact)]**

Pursuant to CEQA Guidelines Section 15064.5 (b)(1), a “substantial adverse change” in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The buildout of the General Plan would allow for new denser infill development potentially in proximity to historic properties, which could lead to incompatibility or impacts on the historical resources. The Morgan Hill 2035 FEIR concluded that future developments under the General Plan would be subject to individual environmental review pursuant with CEQA

and the developments would need to comply with the Morgan Hill Municipal Code Chapter 18.60, which protects cultural and historical resources within the city.

As discussed in Section 4.5.1.2 Existing Conditions, there are no designated historic resources located on the Housing Element Update project locations. Future development under the Housing Element Update would be subject to the City's Municipal Code, which requires site specific evaluations be performed during the environmental review process to determine if a site contains significant historical resources. This site-specific survey would identify potential historical or cultural resources and provide mitigation measures if said resources are on-site. Therefore, the Housing Element Update would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **[Same Impact as Approved Project (Less than Significant Impact)]**

A substantial adverse change would occur if the archaeological resource were to be demolished, destroyed, relocated, or altered such that significance of the resource would be materially impaired. As discussed in Section 4.5.1.2 Existing Conditions, there is the potential for undiscovered archaeological resources in the City on Locations 1, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, and 19 since they are located in archaeologically sensitive areas. Buildout under the General Plan (including the Housing Element Update) could damage or destroy undiscovered archaeological resources during ground-disturbing activities. The Morgan Hill 2035 FEIR concluded that impacts would be less than significant due to project-level compliance with CEQA and the Morgan Hill Municipal Code Section 18.60, which requires that all future developments have an on-site archaeologist present during ground-disturbing construction activities in the case an archaeological resource is discovered as a Standard Condition of Approval. This Standard Conditions of Approval also requires projects to comply with the applicable state and federal laws in the instance human remains are discovered during construction. Future development under the Housing Element Update would comply with the Morgan Hill Municipal Code Section 18.60.090.B, which would ensure that all potential archaeological and historical resources found during construction are treated in accordance with California Public Resources Code 21083.2. Therefore, the Housing Element Update would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **[Same Impact as Approved Project (Less than)]**

As discussed in Impact CUL-2, the buildout of the General Plan (including the Housing Element Update) would involve ground-disturbance, primarily during construction. The discovery of human remains is always a possibility during ground disturbing activities. However, the Morgan Hill 2035 FEIR determined that impacts related to the disturbance of human remains would be less than significant because projects would be required to comply with the State of California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e). In addition, projects permitted by the City of Morgan Hill are

required to follow the standard conditions of approval required by Section 18.60.090(b) of the Morgan Hill Municipal Code to further mitigate potential impacts to buried human remains.³⁵ With adherence to these state laws, future development under the Housing Element Update would reduce impacts related to the discovery of human remains. For these reasons, the Housing Element Update would not result in new or more severe impacts than identified in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than)]**

³⁵ The Morgan Hill 2035 FEIR identifies the section as 18.75.110 but the section numbering has changed since the publication of the FEIR.

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO₂ from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.³⁶ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.³⁷

³⁶ California Building Standards Commission. "California Building Standards Code." Accessed June 17, 2022. <https://www.dgs.ca.gov/BSC/Codes#@ViewBagJumpTo>.

³⁷ California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed June 17, 2022. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.

California Green Building Standards Code

CALGreen (Title 24, Part 11) establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.³⁸

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to conserve energy and mitigate energy impacts resulting from planned developments within the City. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Energy

Policy	Description
NRE-16.1	Energy Standards for New Development. New development, including public buildings, should be designed to exceed State standards for the use of energy.
NRE-16.2	Energy Conservation. Promote energy conservation techniques and energy efficiency in building design, orientation, and construction.
NRE-16.3	Energy Use Data and Analysis. Provide information to increase building owner, tenant, and operator knowledge about how, when, and where building energy is used.
NRE-16.4	Retrofit Financing. Promote existing and support development of new private financing options for building retrofits and renewable energy development.
NRE-16.5	Energy Efficiency. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency.
NRE-16.6	Landscaping for Energy Conservation. Encourage landscaping plans for new development to address the planting of trees and shrubs that will provide shade to reduce the need for cooling systems and allow for winter daylighting.
NRE-16.7	Renewable Energy. Encourage new and existing development to incorporate renewable energy generation features, like solar panels and solar hot water heaters.

³⁸ California Air Resources Board. “The Advanced Clean Cars Program.” Accessed June 17, 2022. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>

Morgan Hill 2035 General Plan Policies: Energy

Policy	Description
NRE-16.8	Residential Development Code. Emphasize energy conservation building techniques for new residential construction through the implementation of Chapter 18.78 ³⁹ of the Municipal Code.
NRE-16.9	Subdivision Design. In compliance with Section 66473.1 of the State Subdivision Map Act, promote subdivision design that provides for passive solar heating and natural cooling through the Development Review Committee subdivision review procedures.
NRE-16.A	Community Choice Aggregation. Partner with other Santa Clara County jurisdictions to determine the feasibility for development of a regional CCA program, including identification of the geographic scope, potential costs to participating jurisdictions and residents, and potential liabilities.
NRE-16.B	Municipal Energy Audit. In cooperation with PG&E, subject all municipal buildings to an energy audit and perform practicable energy conservation alterations on municipal buildings. Such alterations can include modifying automatic heating, cooling, and lighting systems, and installing natural ventilation methods and solar hot water systems, etc.
NRE-16.C	Local Energy Ordinances. Develop local ordinances that promote energy conservation and efficiency. Examples of such ordinances include: energy audits, solar access, solar swimming pool heating, insulation and solar retrofit, and solar water heating.
NRE-16.D	Energy Efficiency Plan. Develop a comprehensive strategy for using energy efficiently at all City facilities.

City of Morgan Hill Municipal Code

In 2019, the Morgan Hill City Council approved Ordinance 2306 and adopted a Reach Code Ordinance (Reach Code) to reduce energy-related GHG emissions consistent with the goals of the Morgan Hill 2021 Climate Action Plan. The Reach Code applies to new construction projects in Morgan Hill. It requires new residential construction to be outfitted with entirely electric fixtures.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,802 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available.⁴⁰ Out of the 50 states, California is ranked second in total energy consumption and 46th in energy consumption per capita. The California Energy consumption breakdown by end-use sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,805 trillion Btu) for industrial uses, and 39 percent (3,073 trillion Btu) for transportation.⁴¹ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

³⁹ Refer to Section 18.156.100.A.6.

⁴⁰ United States Energy Information Administration. “California State Energy Profile.” Last Updated March 17, 2022. Accessed May 27, 2022. Available at: <https://www.eia.gov/state/?sid=CA#tabs-3>

⁴¹ Ibid.

Electricity

In 2020, a total of approximately 16,436 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.⁴² The non-residential sector consumed 12,043 GWh or 73 percent of the total, while the residential sector consumed 4,392 GWh or 25 percent.

Silicon Valley Clean Energy (SVCE) is the electricity provider for residents and businesses in the City of Morgan Hill. SVCE sources the electricity and Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. SVCE customers are automatically enrolled in the GreenStart program, which provides carbon emission-free electricity that is procured from 50 percent renewable energy sources. Customers can choose to enroll in SVCE's GreenPrime program at any time to receive 100 percent GHG emission-free electricity from entirely renewable sources.⁴³

Natural Gas

PG&E provides natural gas services within Morgan Hill. In 2020, approximately two percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.⁴⁴ In 2020, 12,332 millions of therms of natural gas were consumed. The commercial sector consumed approximately 12 percent of the natural gas delivered to California, while the residential sector consumed approximately 23 percent. The electric power sector used 30 percent of the natural gas delivered and the industrial sector used 34 percent. Transportation accounted for one percent of natural gas use in California. In 2020, Santa Clara County (419 millions of therms) used approximately two percent of the state's total consumption of natural gas (12,332 millions of therms).⁴⁵

The City of Morgan Hill's Ordinance No. 2306, which was effective in March 2020, prohibits the use of natural gas infrastructure in new buildings. New buildings are required to use all electric appliances.

Fuel for Motor Vehicles

In 2021, 13.1 billion gallons of gasoline were sold in California.⁴⁶ The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 25.4 mpg in 2020.⁴⁷ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of

⁴² California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed May 13, 2022. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

⁴³ Silicon Valley Clean Energy. "Clean Energy Choices". Accessed May 27, 2022. Available at: <https://www.svcleanenergy.org/choices/>

⁴⁴ California Gas and Electric Utilities. 2020 *California Gas Report*. Accessed May 13, 2021. Available at: https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf

⁴⁵ California Energy Commission. "Natural Gas Consumption by County." Accessed May 13, 2022. Available at: <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

⁴⁶ California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed May 13, 2022. Available at: <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>.

⁴⁷ United States Environmental Protection Agency. "The 2021 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." November 2021. Accessed May 13, 2022. Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013L1O.pdf>.

35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026.^{48,49}

4.6.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Energy Conclusions

The Morgan Hill 2035 concluded that construction and operation of the development proposed under the General Plan would result in an irretrievable commitment of nonrenewable resources for the construction of the infrastructure associated with the General Plan. The operation of said buildout would also represent a new long-term commitment to the consumption of fossil fuels, natural gas, and gasoline. Overall, the General Plan buildout would increase energy demand in Morgan Hill. However, regulatory measures, such as the California Building Code and CalGreen, and the General Plan policies that encourage energy, water, waste, and green building measures would reduce the use of non-renewable resources to the greatest extent possible.

Subsequent to the certification of the Morgan Hill 2035 Final EIR, the Morgan Hill City Council adopted Ordinance No. 2306 (Chapter 15.63 of the Morgan Hill Municipal Code) that prohibits natural gas infrastructure in new buildings effective January 1, 2020. New buildings are required to use all electric appliances. Future housing developments would not use natural gas and, therefore, would not increase natural gas demand.

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **[Same Impact as Approved Project (Less than Significant Impact)]**

⁴⁸ United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed May 13, 2022. Available at: <http://www.afdc.energy.gov/laws/eisa>.

⁴⁹ Public Law 110-140—December 19, 2007. *Energy Independence & Security Act of 2007*. Accessed May 13, 2022. Available at: <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

The construction and operation of future development under the General Plan (including the Housing Element Update) would result in increased short-term and long-term energy consumption. In addition, construction activities associated with development require the use of energy (e.g., electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and construction vehicle travel. The proposed increase in development would result in a long-term increase in energy demand associated with the operation of lighting and space heating/cooling in the added building space, and vehicle travel. As noted in the Morgan Hill 2035 FEIR, new development would be constructed using energy efficient modern building materials and construction practices in accordance with CalGreen Building Code, CPUC's Long Term Energy Efficiency Strategic Plan (2008), and Chapters 15.08, 15.65, 17.32, and 18.156 of the City's Municipal Code, which contain a range of energy conservation and renewable energy measures. Under these requirements, future development under the General Plan (including the Housing Element Update) would use recycled construction materials, environmentally sustainable building materials, building designs that reduce the amount of energy used in building heating and cooling systems as compared to conventionally built structures, and landscaping that incorporates water efficient irrigation systems, all of which would conserve energy. California's CALGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. The General Plan also includes goals, policies, and actions to further conserve energy resources (Goal NRE-16, Policy NRE-16.1, Policy NRE-16.2, Policy NRE-16.3, Policy NRE-16.4, Policy NRE-16.5, Policy NRE-16.6, Policy NRE-16.7, Policy NRE-16.8, Policy NRE-16.9, Action NRE-16.A, Action NRE-16.B, Action NRE-16.C, and Action NRE-16.D). The Morgan Hill 2035 FEIR determined that with the implementation of the above General Plan policies and the applicable state energy efficiency standards that significant energy conservation and savings would be realized by future development under the General Plan (including the Housing Element Update). In addition, consistent with Ordinance No. 2306, future housing development would not use natural gas. For these reasons, and because no changes are proposed to the General Plan Land Use diagram to accommodate the housing needed to meet the City's RHNA target, given adequate available land exists under the currently adopted General Plan with appropriate residential and mixed-use land use designations, the Housing Element would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact EN-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **[Same Impact as Approved Project (Less than Significant Impact)]**

As discussed under Impact EN-1, future development under the Housing Element Update would be subject to current energy efficiency standard set forth in Title 24 and CALGreen. In addition, electricity for all future residential development would be provided by SVCE. SVCE sources the electricity and PG&E delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan, which generates its electricity from 100 percent carbon free sources, with 50 percent from solar and wind sources and 50 percent from hydroelectric. Customers have the option to enroll in the GreenPrime plan, which generates its electricity from 100 percent renewable sources, such as wind and solar. Future development under the Housing Element Update would be completed in compliance with the current energy efficiency standards set forth in Title 24, CALGreen, and the City's Municipal Code. For these reasons, the Housing Element Update

would not conflict with or obstruct state or local plans for renewable energy or energy efficiency.
[Same Impact as Approved Project (Less than Significant Impact)]

4.7 GEOLOGY AND SOILS

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Code prescribes standards for constructing safe buildings. The California Building Code contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The California Building Code requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The California Building Code is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to geological conditions and seismicity. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Geology and Soils

Policy	Description
HC-8.5	Mitigation. Require that if cultural resources, including tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.
SSI-1.1	New Development and Hazards. New development should avoid hazardous and sensitive areas, and should occur only where it can be built without risking health and safety. New habitable structures should not be allowed in areas of highest hazard, such as floodways, active landslides, active fault traces, and airport safety zones. In areas of less risk, development should be limited and designed to reduce risks to an acceptable level. (South County Joint Area Plan 15.00)
SSI-1.2	Hazard Reporting. Known or potential geologic, fire, and flood hazards shall be disclosed as part of every real estate transaction and recorded on documents to be reported for building permits, subdivisions, and land development reports. Mitigation of hazards shall be noted in the same manner.
SSI-1.4	Development Regulations and Hazards. Regulate development in hazardous areas in such a way that it minimizes disruption of the environment and does not trigger or accelerate the hazardous processes which exist in South County. (South County Joint Area Plan 15.02b.)
SSI-1.5	Cluster Development. Cluster development in hazardous areas with dwellings grouped on the least hazardous portion of the property. (South County Joint Area Plan 15.02e)
SSI-1.2	Hazard Reporting. Known or potential geologic, fire, and flood hazards shall be disclosed as part of every real estate transaction and recorded on documents to be reported for building permits, subdivisions, and land development reports. Mitigation of hazards shall be noticed in the same manner.
SSI-1.B	Current Information. Coordinate with local, regional, State, and federal sources to ensure the City maintains complete and current GIS information on fire, flood, and geotechnical hazards.

Morgan Hill 2035 General Plan Policies: Geology and Soils

Policy	Description
SSI-2.1	Land Use and Geologic Hazards. Limit uses on lands with geologic hazards but allow uses on previously urbanized lands with proper mitigation. Keep development in hazardous areas to a minimum by encouraging low-density, low-intensity uses and the type of uses least disruptive to the soil and vegetative cover.
SSI-2.2	Site Preparation for Geologic Stability. On lands with geologic hazards that have already been developed, require mitigation procedures, including geotechnical investigations appropriate for the known or suspected geologic problems.
SSI-2.3	Site Preparation in Hazardous Areas. Require site preparation in hazardous areas to be designed to achieve long-term geologic stability.
SSI-2.4	Code Requirements for Critical Structures. Design and construct critical structures above and beyond the applicable engineering and building standards, where such measures are deemed necessary from available geologic and engineering data. Critical structures are those structures: <ul style="list-style-type: none"> a) needed after a disaster (e.g., emergency communications, fire stations, hospitals, bridges and overpasses); b) whose continued functioning is critical (e.g., major power lines and stations, water lines, and other public utilities); or c) whose failure might be catastrophic (e.g., large dams).
SSI-2.5	Design of Critical Structures. Design and construct critical structures to resist minor earthquakes without damage, resist moderate earthquakes without structural damage, and resist major earthquakes of the intensity or severity of the strongest experienced in California without collapse.
SSI-2.6	Hillside Development. Protect hillsides and carefully control development on steep slopes. When hillside land is developed, it should be done with minimum disruption of topography and vegetative cover.
SSI-2.7	Landslides. Prohibit development on known active landslides and limit development in areas where such development might initiate sliding or be affected by sliding on adjacent parcels.
SSI-2.8	Runoff and Slope Stability. Prohibit development in areas where increased runoff from the addition of impervious surfaces and drainage would increase the probability of downslope landsliding, or where additional projects would add to the cumulative effect of increased runoff, unless a downslope drainage improvement plan has been approved. (South County Joint Area Plan 15.02d)
SSI-2.9	Geologic Studies. Continue to require geologic and geotechnical studies for development in potentially hazardous areas, such as hillside areas and geotechnical studies for critical facilities in areas with liquefiable soils. The costs for consulting geologists shall be covered by a fee to the developer.
SSI-2.10	Slope Stability. Enforce and maintain strict grading and building regulations to minimize instability of slopes sloping areas and reduce public costs associated with maintaining roads and utilities on unstable slopes.
SSI-2.11	Geotechnical Investigations. Require geotechnical investigations on all projects in unstable areas, including areas of expansive soils, prior to construction to ensure that the potential hazards are identified and can be properly mitigated.
NRE-8.1	Contamination from Toxic Chemicals. Protect water quality from contamination, and monitor it to assure that present policies and regulations are adequate. Prohibit such uses

Morgan Hill 2035 General Plan Policies: Geology and Soils

Policy	Description
	as waste facilities, septic systems, and industries using toxic chemicals where polluting substances may come in contact with groundwater, floodwaters, and creeks or reservoir waters. (South County Joint Area Plan 8.00)
NRE-8.2	Septic Systems. Continue land use policies that limit the number of individual septic systems in areas vulnerable to groundwater contamination, because of the potential for cumulative degradation of water quality. (South County Joint Area Plan 8.01)
NRE-8.3	Water Quality Monitoring. Continue to monitor groundwater and surface water quality conditions to determine if changes in regulations regarding septic systems and land use are needed. (South County Joint Area Plan 8.04)
NRE-8.4	Sewer Service for Future Development. In areas where future development is expected to be served by sewers, continue large lot policies which allow minimal development and limited numbers of septic systems. (This approach increases the feasibility of designing future urban density subdivisions with smaller lots, which are more efficient for sewers in terms of service and cost.) (South County Joint Area Plan 8.02)

4.7.1.2 *Existing Conditions*

Geology and Soils

The Project area is located in the Santa Clara Valley, an alluvial basin, bounded by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by the continued tectonic uplift and regression of the inland sea that had previously inundated this area. Bedrock in this area is made up of the Franciscan Complex, a diverse group of igneous, sedimentary, and metamorphic rocks of Upper Jurassic to Cretaceous age (70-140 million years old). Overlaying the bedrock at substantial depths are marine and terrestrial sedimentary rocks of Tertiary and Quaternary age.

The potential for erosion and landslides at the Housing Element Update project locations are low because the parcels are not within a liquefaction landslide zone and the parcels are relatively flat.⁵⁰

Seismicity

An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the Housing Element Update project locations. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions. The City of Morgan Hill is susceptible to the effects of regional seismic activity that produces ground shaking intensity levels of 8.0 (severe shaking) and 9.0 (violent shaking) according to the Modified Mercalli Intensity (MMI) Scale.⁵¹ In the event of a moderate to large earthquake occurring because of one of the faults mentioned above, strong seismic ground shaking is

⁵⁰ California Department of Conservation. “Earthquake Zones of Required Investigation”. Accessed June 6, 2022. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

⁵¹ Metropolitan Transportation Commission/Association of Bay Area Governments. Hazard Viewer Map. Accessed June 6, 2022. Available at:

<https://www.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>

likely to occur on-site. The City of Morgan Hill is not within an Alquist-Priolo Earthquake Fault Zone. The most active faults are the Calaveras Fault, San Andreas Fault, and Sargent Fault, none of which pass through any of the Housing Element project locations.

Liquefaction

Soil liquefaction is a phenomenon in which saturated, cohesion-less soils undergo a temporary loss of strength during earthquake ground shaking. The Morgan Hill SOI is primarily made up of areas with very low, low, and moderate. Areas of high earthquake liquefaction susceptibility are outside the City boundaries.⁵² The following two Housing Element Update project locations are in liquefaction zones that have a moderate earthquake liquefaction susceptibility: Location 1 and 10.⁵³

Paleontological Resources

Paleontological resources or fossils are the remains of prehistoric plant and animal life. Paleontological resources do not include human remains or artifacts. Fossil remains such as bones, teeth, shells, and wood are found in geologic formations. Paleontological resources are limited, non-renewable, sensitive scientific and educational resources. The potential for fossil remains at a location can be predicted based on whether or not previous fossil finds have been made in the vicinity, as well as based on the age of the geologic formations. Based on the findings in the Morgan Hill 2035 FEIR, no paleontological resources have been identified in the City of Morgan Hill.

4.7.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

⁵² Ibid.

⁵³ California Department of Conservation. “Earthquake Zones of Required Investigation”. Accessed June 6, 2022. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Geology and Soils Conclusion

The Morgan Hill 2035 FEIR found that the buildout of the General Plan would not expose people or structures to potential substantial adverse effects from the following geological impacts: rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, liquefaction, and landslides. The future developments would be constructed in accordance with the California Building Code and Morgan Hill Building Code along with complying with the General Plan policies and actions that would ensure impacts related to seismic-related geological effects would be less than significant. Construction of the developments under the General Plan would have the potential to impact water quality through soil erosion but regulations such as the NPDES General Construction Permit and the preparation of a Storm Water Pollution Prevention Plan (SWPPP) along with the City's Urban Storm Water Quality Management and Discharge Control Ordinance would require a plan to incorporate best management practices to control erosion and runoff. These regulations along with the General Plan policies would reduce soil erosion impacts to less than significant.

Developments may also be located on unstable geologic unit or soil that could potentially result in landslide, lateral spreading, subsidence, liquefaction, or collapse. General Plan Policy SSI-1.4 along with the California Building Code and Morgan Hill Building Code would regulate the building design to reduce the effects of geologic instability and impacts would be less than significant.

Impacts related to expansive soils would also be less than significant due to the provisions of the General Plan, the California Building Code, and the Morgan Hill Building Code. Regarding the installation of septic tanks, the developments proposed by the General Plan would likely be serviced

by the existing utilities infrastructure but in the case a septic tank is required an application with detailed plans would be submitted to the City pursuant with the Morgan Hill Municipal Code Chapter 13.24. This process along with General Plan Policies NRE-8.1, Policy NRe-8.2, Policy NRe-8.3, and Policy NRE-9.4 would ensure impacts would be less than significant.

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **[Same Impact as Approved Project (Less than Significant Impact)]**

Fault Rupture

As discussed in Section 4.7.1.2 Existing Conditions, the Morgan Hill SOI is not located in a Alquist-Priolo Earthquake Fault Zone. While existing faults are located in the region, the Housing Element project locations are outside of the fault zone for any regional fault systems, and loss, injury, or death from fault ruptures would not occur on the Housing Element Update project locations. **[Same Impact as Approved Project (Less than Significant Impact)]**

Ground Shaking

Strong ground shaking could likely occur with the potential for seismically induced liquefaction and landslides. The General Plan area (including the Housing Element project locations) is located in a seismically active region with other faults identified in the region (Silver Creek, Coyote Creek, and Range Front Faults). Impacts related to these geological hazards would be reduced to a level of less than significant because future developments would be designed in accordance with the California Building Code and Morgan Hill Building Code. Both building codes provide specific engineering and seismic safety design requirement. Policies from the General Plan would also help reduce potential hazards related to fault rupture and seismic ground shaking (Policy SSI-1.1, Policy SSI-1.2, Policy SSI-1.5, Action SSI-1.B, Policy SSI-2.1, Policy SSI-2.2, Policy SSI-2.3, Policy SSI-2.4, Policy SSI-2.5, Policy SSI-2.6, Policy SSI-2.8, and Policy SSI-2.9). The buildout of the Housing Element Update would be required to comply with and be designed in accordance with the California Building Code and Morgan Hill Building Code, which would ensure that future developments are designed to protect public safety. Therefore, the Housing Element Update would not result in new or more severe impacts related to ground shaking than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Ground Failure, Liquefaction, and Lateral Spreading

As discussed in the Morgan Hill 2035 FEIR, impacts related to seismic-related ground failure, including liquefaction, would be less than significant with adherence to the California Building Code and the Morgan Hill Building Code design standards along with the General Plan policies (Policy SSI-2.2 and Policy SSI-2.9).

Housing Element Location 1 and 10 are in liquefaction zones that have a moderate earthquake liquefaction susceptibility. However, development proposed under the Housing Element Update

would be designed to comply with the California and Morgan Hill Building Codes and each individual development would be required to prepare geotechnical studies prior to the commencement of construction pursuant with the General Policy SSI-2.2 and Policy SSI-2.9. Therefore, the Housing Element Update would not result in new or more severe impacts related to ground failure than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Landslides

The Morgan Hill 2035 FEIR determined impacts related to seismic-related landslides were less than significant since development under the General Plan would need to comply with the California and Morgan Hill Building Codes to protect property and public safety with safe building design, and General Plan Policy SSI-2.7 prohibits development in areas on known active landslides or limit such development.

The Housing Element Update project locations are not located in liquefaction zones as identified by California Geological Survey. However, the residential developments proposed under the Housing Element Update would still be required to comply with the California and Morgan Hill Building Codes to ensure buildings are designed to reduce seismic-related ground failure or landslides. Therefore, the Housing Element Update would not result in new or more severe impacts related to landslides than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact GEO-2: The project would not result in substantial soil erosion or the loss of topsoil. **[Same Impact as Approved Project (Less than Significant Impact)]**

Construction of future developments proposed under the General Plan (including the Housing Element Update) would likely include grading and earthwork activities that would disturb topsoil with the potential for substantial soil erosion. The Morgan Hill 2035 FEIR concluded that compliance with federal (National Pollutant Discharge Elimination System [NPDES] General Construction Permit) and local regulations (City of Morgan Hill Urban Storm Water Quality Management and Discharge Control Ordinance and City-approved best management practices) would reduce impacts related to soil erosion or topsoil loss to less than significant through the implementation of best management practices (BMPs) to control sedimentation, erosion, and stormwater water runoff. The residential development facilitated by the Housing Element Update would be designed to comply with these federal and local regulations described above. For these reasons, the Housing Element Update would not result in new or more severe soil erosion impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. [Same Impact as Approved Project (Less than Significant Impact)]
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As discussed under Impact GEO-1, there is potential for landslides, lateral spreading, subsidence, or liquefaction within the Morgan Hill SOI. However, the Morgan Hill 2035 FEIR concluded that impacts would be less than significant since all future developments proposed under the General Plan buildout (which includes the Housing Element Update) would be designed to comply with the California Building Code and the Morgan Hill Building Codes. This would ensure that specific standards to protect property and public safety are included in the design and construction of future developments. Additionally future developments under the General Plan would be required to prepare geotechnical investigations prior to construction and the individual developments would need to implement the measures recommended in the investigations to reduce potential adverse impacts. General Plan Policy SSI-1.4 would also limit exposure to landslides, lateral spreading, subsidence, liquefaction, or collapse by regulating development in hazardous areas to not trigger or accelerate hazardous processes. Residential development under the Housing Element Update would be designed consistent with the recommended measures in the project-specific geotechnical investigations, the California Building Code, the Morgan Hill Building Code, and the General Plan policies. For these reasons, the Housing Element Update would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse by employing standard design and engineering practices and adhering to the California Building Code and City's Building Code. Therefore, the Housing Element Update would not result in new or more severe impacts related to geologic instability. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. [Same Impact as Approved Project (Less than Significant Impact)]
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As determined in the Morgan Hill 2035 FEIR, impacts related to expansive soils would be less than significant since future developments would be designed in compliance with the California Building Code and the Morgan Hill Building Code. General Plan Policy SSA-2.11 also requires a geotechnical investigation be completed proper to construction to identified potential hazards that can be mitigated.

Future development under the Housing Element Update would be subject to the same regulations and provisions in the California Building Code, the Morgan Hill Building Code, and the General Plan, which would ensure risks due to expansive soils would be less than significant. Therefore, the Housing Element Update would not result in new or more severe impacts related to expansive soils. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. [Less Impact than Approved Project (Less than Significant Impact)]
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The buildout of the General Plan would be generally within City limits with connection access to the public sewer system. However, septic tank systems are allowed in cases where connection to the public sewer system is not available. As described in the Morgan Hill 2035 FEIR, future developments that install septic systems would be subject to the requirements of Chapter 13.24 of the Morgan Hill Municipal Code, which includes a permitting process to review the design and compatibility of the septic tank. This process would ensure no negative environmental impacts would occur.

Future development under the Housing Element Update would connect to the existing public sewer system. Therefore, the Housing Element Update would have no impact on soils due to the use of septic tanks and impacts would be less than the impacts disclosed in the Morgan Hill 2035 FEIR. **[Less Impact than Approved Project (Less than Significant Impact)]**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. [Same Impact as Approved Project (Less than Significant Impact)]
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No paleontological resources have been identified in the City of Morgan Hill.⁵⁴ However, the possibility that construction of new development may uncover paleontological resources exists. The Morgan Hill 2035 FEIR concluded that potential impacts related to paleontological resources would be less than significant through the implementation of standard conditions of project approval described under Impact CUL-2 and through individual project-specific review pursuant to CEQA.

Future development under the Housing Element Update would be subject to project-specific environmental review and would be required to implement standard conditions of project approval to mitigate potential impacts to the greatest extent feasible. For this reason, the Housing Element Update would not result in new or more severe impacts related to paleontological resources. **[Same Impact as Approved Project (Less than Significant Impact)]**

⁵⁴ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Page 4.5-17. January 2016.

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

4.8.1.2 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF₆ emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.3 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of

GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO₂e (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2050. Plan Bay Area 2050 establishes a course for reducing per capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Updated BAAQMD GHG Thresholds

On April 20, 2022, the BAAQMD Air District Board of Directors adopted the *Proposed CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*.⁵⁵ For land use projects, BAAQMD recommends a qualitative approach that requires development to incorporate specific project-design elements or show consistent with a qualified GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b). For programmatic planning documents, BAAQMD recommends plans meet the State's goal to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045, or be consistent with a qualified GHG reduction strategy.⁵⁶

The adoption of new qualitative thresholds by BAAQMD does not constitute new information, as defined by CEQA Guidelines section 15162, that needs to be incorporated into this analysis. The Morgan Hill 2035 FEIR includes numerical GHG thresholds, and the FEIR was certified by the City of Morgan Hill. Therefore, Initial Study/Addendum will continue to rely on the quantitative thresholds and impacts concluded in the Morgan Hill 2035 FEIR.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to greenhouse gases. The following policies are applicable to the proposed Housing Element.

Morgan Hill 2035 General Plan Policies: Greenhouse Gases

Policy	Description
NRE-15.1	Greenhouse Gas Emission Reduction Targets. Maintain a greenhouse gas reduction trajectory that is consistent with the greenhouse gas reduction targets of Executive Order B-30-15 (40 percent below 1990 levels by 2030) and S-03-05 (80 percent below 1990 levels by 2050) to ensure the City is consistent with statewide efforts to reduce greenhouse gas emissions.
NRE-15.2	Linking Land Use and Transportation. Encourage land use and transportation patterns that reduce dependence on automobiles.
NRE-15.3	Climate Action Plan. Utilize policies in this General Plan denoted with the green leaf symbol as the City's greenhouse gas emissions reduction strategy.
NRE-15.4	Sustainable Land Use. Promote land use patterns that reduce the number and length of motor vehicle trips.
NRE-15.5	Jobs Housing Balance. To the extent feasible, encourage a balance and match between jobs and housing.
NRE-15.7	Mix of Uses in Employment Centers. Encourage employment areas to include a mix of support services to minimize the number of employee trips.

⁵⁵ BAAQMD. "CEQA Thresholds and Guidelines Update". Accessed May 27, 2022. Available at: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>

⁵⁶ BAAQMD. *CEQA Thresholds for Evaluating the Significance of Climate Impacts*. April 2022. Accessed May 27, 2022. Available at: <https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en>

Morgan Hill 2035 General Plan Policies: Greenhouse Gases

Policy	Description
NRE-15.8	Walkable City. Encourage retail and office areas to be located within walking and biking distance of existing and proposed residential developments.
NRE-15.9	Urban Forest. Support development and maintenance of a healthy, vibrant urban forest through outreach, incentives, and strategic leadership.
NRE-15.10	VMT Reduction. Continue to work with the Santa Clara Valley Transportation Authority on regional transportation solutions that will reduce vehicle miles traveled and greenhouse gas emissions.
NRE-15.11	Green Building. Promote green building practices in new development.
NRE-16.1	Energy Standards for New Development. New development, including public buildings, should be designed to exceed State standards for the use of energy.
NRE-16.2	Energy Conservation. Promote energy conservation techniques and energy efficiency in building design, orientation, and construction.
NRE-16.3	Energy Use Data and Analysis. Provide information to increase building owner, tenant, and operator knowledge about how, when, and where building energy is used.
NRE-16.5	Energy Efficiency. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency.
NRE-16.6	Landscaping for Energy Conservation. Encourage landscaping plans for new development to address the planting of trees and shrubs that will provide shade to reduce the need for cooling systems and allow for winter daylighting.
NRE-16.7	Renewable Energy. Encourage new and existing development to incorporate renewable energy generating features, like solar panels and solar hot water heaters.
NRE-16.8	Residential Development Code. Emphasize energy conservation building techniques for new residential construction through the implementation of Chapter 18.78 ⁵⁷ of the Municipal Code.
NRE-16.9	Subdivision Design. In compliance with Section 66473.1 of the State Subdivision Map Act, promote subdivision design that provides for passive solar heating and natural cooling through the Development Review Committee subdivision review procedures.

⁵⁷ Refer to Section 18.156.100.A.6.

City of Morgan Hill Municipal Code

In 2019, the Morgan Hill City Council approved Ordinance 2306 and adopted a Reach Code Ordinance (Reach Code) to reduce energy-related GHG emissions consistent with the goals of the Morgan Hill 2021 Climate Action Plan. The Reach Code applies to new construction projects in Morgan Hill. It requires new residential construction to be outfitted with entirely electric fixtures.

Morgan Hill 2021 Climate Action Plan

The Morgan Hill 2021 Climate Action Plan includes goals and actions that focus on the adoption of electric vehicles in the community and the process of decarbonizing existing buildings by reducing the use of fossil fuels. The Climate Action Plan goal is to eliminate natural gas usage and transition 95 percent of existing buildings in Morgan Hill to all-electric by 2045. The Climate Action Plan also proposes to prohibit any new gas stations. On December 15, 2021, the City adopted the Climate Action Plan with guidelines of reducing Morgan Hill's net CO₂ emissions in the building and transportation sectors 35 percent below the 2020 baseline level by 2030 and 100 percent below the 2020 baseline level by 2045.⁵⁸

Applicable measures in the Climate Action Plan include:

- Action Item 4.a: Require all new construction of single family detached homes, townhouses, and other dwelling units with a garage to install a listed raceway to accommodate a 208/240-volt branch circuit for potential EV charging to be installed in accordance with the California Electrical Code, Article 625.
- No natural gas use.

However, the Climate Action Plan does not have a specific metric ton GHG threshold for project-level operation nor a Climate Action Plan Compliance Checklist. It is not a qualified GHG reduction strategy that meets the criteria under the CEQA Guidelines Section 15183.5(b).

4.8.1.4 *Existing Conditions*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns.

⁵⁸ City of Morgan Hill, *Morgan Hill 2021 Climate Action Plan*, December 15, 2021, <https://www.morgan-hill.ca.gov/DocumentCenter/View/40166/Climate-Action-Plan-Draft-December-9-2021-?bidId=>

4.8.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – GHG Conclusions

The Morgan Hill 2035 FEIR concluded that buildout of the General Plan would achieve the 2020 and 2035 GHG efficiency targets due to state and local reductions along with the General Plan policies. Therefore, the General Plan would comply with AB 32 and EO B-30-15, which is now recognized as SB 32. However, beyond 2035, operation of the development proposed under the General Plan would not achieve the 2050 efficiency target to comply with the 2050 statewide goal under EO S-03-05 (80 percent below 1990 levels by 2050) because additional state and federal actions would be needed to drive further GHG reductions to achieve the 2050 target. Therefore, GHG impacts beyond 2035 would have a significant and unavoidable impact on the environment. However, the General Plan policies would support CARB's 2008 Scoping Plan and the 2013 Plan Bay Area. The General Plan buildout would not conflict with the applicable plans; therefore, impacts related to GHG plans, policies, and regulations would be less than significant.

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **[Less Impact than Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR analyzed a net growth of 6,861 residences in addition to 755,550 square feet of new retail, 628,700 square feet of new office space, 1,777,400 square feet of new industrial space, 417,600 square feet of new service space, and 287,400 square feet of new public facilities space. The forecasted 2035 GHG emissions generated from the buildout of the General Plan were estimated to be 3.6 metric tons of CO₂e (MT CO₂e) per service population per year, which would exceed the 2035 plan-level efficiency target of 3.3 MT CO₂e per service population per year. However, implementation of GHG reduction goals and policies from the General Plan focused on reducing energy, transportation, water, and solid waste GHG emissions would reduce the 2035 service population emissions to 3.2 MT CO₂e per service population per year, which is below the 2035 efficiency target.

As discussed in Section 3.6 Buildout Projections, all of the City's pipeline residential capacity (including the Housing Element Update project locations) falls within the buildout projections of the Morgan Hill 2035 Final EIR. Since full buildout of the Housing Element Update would be complete

and operating by the year 2031, the Housing Element Update would not generate new GHG emissions that were not already captured in the Morgan Hill 2035 FEIR GHG analysis. The buildout of the General Plan (including the Housing Element Update) would achieve the 2035 performance criteria described in the Morgan Hill 2035 FEIR. Further, consistent with the City's Reach Code, all future housing development would not use natural gas. The Housing Element Update would result in a lesser impact than identified in the Morgan Hill 2035 FEIR. **[Less Impact than Approved Project (Less than Significant Impact)]**

However, as described in the Morgan Hill 2035 FEIR, the full buildout of the General Plan would not achieve the 2050 interpolated service population threshold since future statewide reduction programs would be needed to meet the 2050 goal identified in Executive Order S-03-05. It was determined that impacts would be significant and unavoidable. Therefore, future cycles of the Housing Element Update would likely result in the same significant and unavoidable impact determination.

Impact GHG-2: The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that goals, policies, and actions included in the General Plan that focus on reducing energy, water, transportation and solid waste sources of GHG emissions are consistent with the CARB Scoping Plan, and the General Plan would be consistent with Plan Bay Area since it would encourage the development of new residences near the Morgan Hill Downtown Transit Town Center, an identified Priority Development Area. In addition, buildings constructed as part of the General Plan buildout would be designed in a manner to conserve water (Policy NRE-7.1 and Policy NRE-7.3), to support multi-modal transportation by accommodating bicycle and pedestrian facilities (Policy CNF-11.8 and Policy CNF-11.28), to promote reduced vehicle trips through sustainable land use planning (Policy NRE-15.4, Policy NRE-15.6, and Policy NRE- 15.8), to conserve energy by complying with CalGreen (Policy NRE-15.11 and Policy NRE-16.8), and to reduce waste through recycling (Policy SSI-17.12 and Action SSI-17.A).

All future residences facilitated by the Housing Element Update would comply and be designed consistent with the policies in the General Plan, which support the goals and measures in the CARB Scoping Plan and Plan Bay Area. The Housing Element Update would also facilitate the construction of some residential development in proximity to the Morgan Hill Downtown Transit Town Center (Location 5, 6, 7, 14.,17, 18).⁵⁹ Therefore, implementation of the Housing Element Update would not result in new or substantially more severe impacts related to applicable GHG plans, policies, or regulations. **[Same Impact as Approved Project (Less than Significant Impact)]**

⁵⁹ MTC. Priority Development Areas (Plan Bay Area 2050). Accessed June 19, 2022.
<https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2050/explore?location=37.117102%2C-121.671554%2C13.93>

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, \$1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on the EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.⁶⁰

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.⁶¹

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous

⁶⁰ United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed April 19, 2022. <https://www.epa.gov/superfund/superfund-cercla-overview>.

⁶¹ United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 11, 2020. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).⁶²

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara County Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

⁶² California Environmental Protection Agency. “Cortese List Data Resources.” Accessed April 19, 2022. <https://calepa.ca.gov/sitcleanup/corteselist/>.

Regional and Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to hazards and hazardous materials. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Hazards and Hazardous Materials

Policy	Description
NRE-12.3	Control Measures. Require construction and demolition projects that have the potential to disturb asbestos (from soil or building material) to comply with all the requirements of the California Air Resource board's air toxics control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.
SSI-1.3	Safety Public Education Programs. Continue and improve public education programs that: a) increase awareness of the safety hazards present in South County, b) provide information on mitigation techniques, and c) strengthen public support for adopted policies which might restrict development in hazardous areas. (South County Joint Area Plan 15.15)
SSI-1.4	Development Regulations and Hazards. Regulate development in hazardous areas in such a way that it minimizes disruption of the environment and does not trigger or accelerate the hazardous processes which exist in South County. (South County Joint Area Plan 15.02b.)
SSI-1.A	Management of Hazardous Areas. Continue existing development regulations and policies regarding management of hazardous areas, with monitoring to determine their effectiveness. Make policy changes only after review by all three South County jurisdictions. (South County Joint Area Plan 15.10 & 15.11)
SSI-3.1	Development in Fire Hazard Areas. Minimize development in fire hazard areas and plan and construct permitted development so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire. (South County Joint Area Plan 15.04)
SSI-3.2	Wildfire Risks. Avoid actions which increase fire risk, such as increasing public access roads in fire hazard areas, because of the great environmental damage and economic loss associated with a large wildfire. (South County Joint Area Plan 15.04)
SSI-3.3	Public Facilities Location. Locate, when feasible, new essential public facilities outside of high fire risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identify construction methods or other methods to minimize damage if these facilities are located in a state responsibility area or very high fire hazard severity zone.
SSI-3.4	Adequate Infrastructure. Design adequate infrastructure if a new development is located in a state responsibility area (SRA) or in a very high fire hazard severity zone (VHFHSZ) or high fire hazard severity zone (HFHSZ) as indicated on the City of Morgan Hill Wildland Urban Interface map (adopted March 18, 2009), including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
SSI-3.5	Fire Risks. Work cooperatively with CAL FIRE and other public agencies with responsibility for fire protection to reduce fire risks in Morgan Hill.

SSI-3.6 **Fire Hazard Severity Zones.** Continue to support special High Fire Hazard Severity Zone requirements.

SSI-4.13 **Household Waste.** Offer regular household hazardous waste collection programs and other related activities in order to limit the types and amounts of hazardous waste entering the ordinary waste stream.

SSI-4.16 **Contaminated Soil Mitigation.** Require new or expanding development projects in areas contaminated from previous discharges to mitigate their environmental effects.

SSI-4.3 **Use and Handling Requirements.** Continue a program of regular inspections and monitoring to ensure compliance with local, State, and federal regulations, in order to reduce the risks associated with the use and handling of hazardous materials and wastes.

SSI-4.4 **Industrial and Commercial Users and Generators.** Continue to implement the Joint Powers Pretreatment Program for industrial and commercial hazardous material users and/or hazardous waste generators, and coordinate as appropriate with Memoranda of Understanding (MOU) inspections, Hazardous Materials Storage Ordinance (HMSO) regulations, and implementation of applicable State laws. (South County Joint Area Plan 9.01)

SSI-4.5 **Storage and Usage.** Regularly inspect activities that store and/or use hazardous materials, including above-ground and underground storage tanks and related equipment, to ensure compliance with the City's Hazardous Materials Storage Ordinance (HMSO).

SSI-4.6 **Short-Term Storage.** Regularly inspect those facilities which store hazardous waste on site for less than 90 days (a time period for which a hazardous materials storage permit is not required). (South County Joint Area Plan 9.03)

SSI-4.7 **Handling.** Require submittal of a hazardous materials handling plan as a prerequisite for developments requiring zone changes and use permits. (South County Joint Area Plan 9.04)

SSI-7.1 **Airport Land Use Compatibility Plan.** Work closely with appropriate agencies, including the Santa Clara County Airport Land Use Commission, to ensure compatibility of land uses with airport facilities and operations.

SSI-7.2 **Airspace Protection.** Limit building heights for airspace protection in accordance with Federal Aviation Regulations Part 77.

SSI-12.4 **Maintenance of Emergency Access Routes.** Require that emergency access routes be kept free of traffic impediments.

SSI-12.5 **Emergency Response Plan.** Maintain comprehensive Emergency Response Plans.

SSI-12.6 **Accessibility.** Continue restricting development in areas of poor accessibility. Discourage development in areas where access is provided by a single road that could be damaged by faulting or landslides, or where access could be cut off by wildfires, trapping residents or workers. (South County Joint Area Plan 15.07)

SSI-12.A **Emergency Access.** Where appropriate, allow development in areas where a second improved access road has been provided for emergency escape. (South County Joint Area Plan 15.07)

SSI-12.B **Safety Drills.** Conduct periodic drills using emergency response systems to test the effectiveness of City procedures.

4.9.1.2 Existing Conditions

Hazardous Materials Sites

The following discussion is based on a search of the DTSC online EnviroStor database and the SWRCB online GeoTracker database. In Morgan Hill, a total of 21 sites were identified from the EnviroStor database.⁶³ A total of 91 sites involving underground storage system (UST), leaking underground storage system (LUST) and Spills, Leaks, Investigation, and Cleanups (SLIC) were identified from the GeoTracker database.⁶⁴ None of the sites identified are located on the Housing Element Update project locations.

Wildland Fires

Morgan Hill's Fire Hazard Severity Zones range from Moderate to High.⁶⁵ These zones are primarily located in hillside areas. According to CAL FIRE, two of the Housing Element Update project locations (Location 16 and 19) are located in a Very High Fire Hazard Severity Zone.⁶⁶

Airport Hazards

The Morgan Hill SOI is approximately 1.5 miles northwest of the nearest public airport, the South County Airport of Santa Clara County in San Martin. No Housing Element Update project locations are located in the South County Airport Influence Area (AIA) or within the South County Airport Safety Zones.⁶⁷ There are no private airstrips within the Morgan Hill SOI.

⁶³ Department of Toxic Substances Control. "EnviroStor for the City of Morgan Hill". Accessed June 2, 2022. Available at: <https://www.envirostor.dtsc.ca.gov/public/>

⁶⁴ State Water Resources Control Board.. "GeoTracker for the City of Morgan Hill". Accessed June 2, 2022. Available at: <https://geotracker.waterboards.ca.gov/>

⁶⁵ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Figure 4.8-2. January 2016.

⁶⁶ CAL FIRE. "FHSZ Viewer." Accessed April 19, 2022. <https://egis.fire.ca.gov/FHSZ/>

⁶⁷ Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County San Martin Airport*. Figure 5. Accessed June 6, 2022. Available at: https://stgenpln.blob.core.windows.net/document/ALUC_E16_CLUP.pdf

4.9.2

Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Hazards and Hazardous Materials Conclusion

The Morgan Hill 2035 FEIR concluded that buildup of the General Plan would not create a significant hazard to the public or the environment through the routine transportation, use or handling of hazardous materials. The future developments under the General Plan would also not create a significant hazard to the public or the environment due to the accidental release of hazardous materials. The impacts would be less than significant because regulations from the RWQCB and DTSC require specific handling and removal of hazardous materials. There are also General Plan policies (Policy SSI-1.3, Policy SSI-1.4, Action SSI-1.A, Policy SSI-4.3, Policy SSI-4.4, Policy SSI-4.5, Policy SSI-4.6, and Policy SSI-4.7) that would further ensure that new developments constructed as part of the General Plan do not create a significant hazard. The future developments could also be within one quarter of a mile of an existing or proposed school and/or located on a hazardous materials site listed on database complied pursuant to Government Code Section 65962.5, but the potential hazardous impacts would be less than significant because of the regulations and General Plan policies previously mentioned. Also, while a portion of the Morgan Hill SOI is within the AIA of the South County Airport in San Martin, the Morgan Hill City limits and SOI are located outside the airport's noise contours and safety zones; therefore, the General Plan buildup would not result in an airport safety hazard. Impacts related to interference with an adopted emergency response plan would also be less than significant because of General Plan policies and actions that would ensure new developments do not conflict with emergency operations in Morgan Hill. Lastly, for developments that are potentially in wildfire risk areas there are General Plan policies that would ensure developments in said areas are located and designed in a manner that minimize hazards from wildland fires and reduce impacts to less than significant.

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **[Same Impact as Approved Project (Less than Significant Impact)]**

As described in the Morgan Hill 2035 FEIR, hazardous materials are routinely transported and handled at industrial, commercial/industrial, and agricultural uses within the City. The Morgan Hill 2035 FEIR concluded that compliance with applicable federal, state, and local regulations related to handling of hazardous materials, combined with the General Plan policies (Policy SSI-1.3, Policy SSI-1.4, Action SSI-1.A, Policy SSI-4.3, Policy SSI-4.4, Policy SSI-4.5, Policy SSI-4.6, and Policy SSI-4.7) would reduce risks associated with hazardous materials to less than significant by requiring hazardous materials handling plans and the regular inspection of hazardous materials storage tanks and associated equipment to ensure proper handling.

Construction of future development under the Housing Element Update would require the potential use of hazardous materials, including vehicle fuels, oils, and fluids. All hazardous materials would be transported, contained, stored, used, and disposed of in accordance with applicable federal, state, and local handling, storage, and disposal requirements. Construction-related hazardous materials use for a given Housing Element project location would be temporary, and does not constitute routine transport, use, or disposal. Once operational, future residences under the Housing Element would not involve the handling of hazardous materials since residential uses typically only use household cleaners or paints, which are not hazardous. For these reasons, the storage and handling of hazardous materials within residences under the Housing Element Update would not result in a new or more

severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HAZ-2: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that buildout under the General Plan could disturb residual hazardous materials contamination present in the soil or groundwater, which has the potential to impact construction workers and adjacent land uses. Likewise, demolition of existing structures in order to implement buildout under the General Plan could potentially result in release of hazardous building materials (i.e., asbestos, lead paint, PCBs, etc.) into the environment. Impacts related to the release of hazardous materials would be reduced due to developments complying with applicable federal, state, local laws and regulations, combined with the General Plan policies and strategies described under Impact HAZ-1, including the preparation of Phase I/II Environmental Site Assessments to document soil and/or groundwater conditions on or near sites that could be released into the environment during construction, and identify protocols to be implemented during construction to ensure no release of contaminants that would affect construction workers and sensitive nearby uses.

Construction of future development associated with the Housing Element Update would be required to comply with the applicable regulations to ensure a significant hazard to the public through the release of hazardous materials into the environment does not occur. Therefore, the Housing Element Update would not result in new or more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HAZ-3: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR determined that the future development under the General Plan may result in locating land uses associated with hazardous material within a quarter mile of existing or proposed schools. However, impacts would be less than significant due to compliance with applicable federal, state, local laws and regulations and adherence to the General Plan policies listed in Impact HAZ-1.

The following Housing Element Update project locations are located within a quarter mile of existing schools:

- Monterey-Lucky Shing Manzinita Park (Location 1),
- Monterey-Kerley [DeNova Homes (Location 10)],
- Tilton-Lee Schmidt (Location 13),
- Monterey-First Community Housing [Magnolias] (Location 14),
- Monterey- Morgan Hill Senior Housing (Location 17),

- Watsonville- Hordness [Crossings at Monterey/Royal Oaks Village] (Location 20)
- Lillian Commons/Rosewood (Location 22),
- Half-Dividend [Crosswinds] (Location 11),
- APN 726-230-18, 726-230-19, 726-230-20 (Location 6),
- APN 817-090-36 (Location 22), and
- APN 817-090-55 (Location 22)

No new schools are proposed in Morgan Hill. Future residential developments under the Housing Element Update would comply with the applicable federal, state, and local laws (refer to Impact HAZ-1 and Impact HAZ-2) to ensure hazardous emissions are not emitted within a quarter mile of schools and impacts would be less than significant. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HAZ-4: The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **[Less Impact as Approved Project (No Impact)]**

As described in the Morgan Hill 2035 FEIR, compliance with applicable federal, state, local laws and regulations, combined with General Plan policies and strategies, would ensure that impacts from locating developments on site with hazardous materials would be less than significant.

As described in Section 4.9.1.2 Existing Conditions, none of the Housing Element Update sites are included on a list of hazardous materials sites pursuant to Government Code Section 65962.5 and no impacts would occur. Therefore, the Housing Element Update would result in less impacts than disclosed in the Morgan Hill 2035 FEIR. **[Less Impact as Approved Project (No Impact)]**

Impact HAZ-5: The project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **[Less Impact as Approved Project (No Impact)]**

As described in the Morgan Hill 2035 FEIR, a small portion of the southern Morgan Hill SOI extends into the South County AIA but no portions of the SOI are within the airport's safety or noise contours. The Morgan Hill 2035 FEIR concluded that based on the distance from the safety and noise contours there would be no significant impacts but General Plan policies Policy SSI-7.1 and Policy SSI-7.2 would further ensure that future developments are consistent with the South County Airport Comprehensive Land Use Plan. Therefore, impacts related to safety hazard or excessive noise from an airport would be less than significant.

As described in Section 4.9.1.2 Existing Conditions, none of the Housing Element Update project locations are within the AIA or safety zone for the South County Airport. Therefore, the Housing Element Update would have no impacts related to airport hazards and the Housing Element Update

would result in less impacts than disclosed in the Morgan Hill 2035 FEIR. **[Less Impact as Approved Project (No Impact)]**

Impact HAZ-6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that buildout under the General Plan would not impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. Compliance with the following General Plan policies and actions would ensure that new development would not conflict with emergency operations in Morgan Hill: Policy SSI-12.4, Policy SSI-12.5, Policy SSI-12.6, Action SSI-12.A, and Action SSI-12.B. These policies require that emergency access routes be kept free of traffic impediments, an emergency response plan is maintained restricts development in areas of poor accessibility, and allows developments where a second improved access road has been provided for emergency escape.

Future development proposed under the Housing Element Update would be designed in accordance with the above referenced General Plan policies to ensure there would be no conflict with the Morgan Hill Emergency Operation Plan. Therefore, the Housing Element Update would have less impact than the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HAZ-7: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that implementation of the General Plan would have less than significant wildfire fire hazard impacts. As described in Section 4.9.1.2 Existing Conditions, two of the Housing Element Update project locations (Location 16 and 19) are located in a Very High Fire Hazard Severity Zone. Future development under the Housing Element Update would comply with applicable federal, state, local laws and regulations (e.g., Morgan Hill Municipal Code Section 15.44.190), and General Plan policies (Policy SSI-3.1, Policy SSI-3.2, Policy SSI-3.3, Policy SSI-3.4, Policy SSI-3.5, and Policy SSI-3.6) to ensure impacts from wildland hazards are less than significant. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the NPDES permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The Housing Element Update project locations are within the jurisdiction of the San Francisco Bay RWQCB (Location 1, 9, 10, 13, 15) and the Central Coast RWQCB (Location 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 16, 17, 18, 19, 20, 21, and 22).

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing

waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City’s stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in May 2022 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.⁶⁸ Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site’s natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if: (1) the post-project impervious surface area is less than, or the same as, the pre-project impervious surface area; (2) the project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes, which extend continuously to the Bay, Delta, or flow controlled reservoir, or, in a catchment that drains to channels that are tidally influenced; or (3) the project is located in a catchment or sub watershed that is highly developed (i.e., that is 70 percent or more impervious).⁶⁹

Phase II Small MS4 General Permit

Gilroy, Morgan Hill, and the portion of Santa Clara County that drains to the Pajaro River-Monterey Bay watershed, which includes some of the Housing Element Update project locations as noted above, are traditional permittees under the state’s Phase II Small MS4 General Permit. Since these regions are located in RWQCB Region 3 (Central Coast Region), they are subject to the Central Coast Post-Construction Requirements per Provision E.12.k of the Phase II Permit. The Central Coast Post-Construction Requirements became effective in 2014 and are specific to the Central Coast Region. Post-construction controls are permanent features of a new development or redevelopment project designed to reduce pollutants in stormwater and/or erosive flows during the life of the project. Types of post-construction controls include low impact development (LID) site design, pollutant

⁶⁸ California Regional Water Quality Control Board San Francisco Region. *Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008*. May 11, 2022

⁶⁹ The Hydromodification Applicability Maps developed the permittees under Order No. R2-2009-0074 were prepared using this standard, adjusted to 65 percent imperviousness to account for the presence of vegetation on the photographic references used to determine imperviousness. Thus, the maps for Order No. R2-2009-0074 are accepted as meeting the 70 percent requirement.

source control, stormwater treatment, and hydromodification management measures. The LID approach reduces stormwater runoff impacts by minimizing disturbed areas and impervious surfaces, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses).⁷⁰

2021 Groundwater Management Plan

The 2021 Groundwater Management Plan (GWMP) describes the Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley Water manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes the District's State Water Project and Central Valley contract supplies and supplies delivered by the San Francisco Public Utilities Commission (SFPUC) to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by the District's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu groundwater recharge through the provision of treated surface water and raw water, acquisition of supplemental water supplies, and water conservation and recycling.⁷¹

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

⁷⁰ City of Gilroy, City of Morgan Hill, and County of Santa Clara. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements*. June 2015.

⁷¹ Valley Water. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2021.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to hydrology and water quality. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Hydrology and Water Quality

Policy	Description
NRE-5.5	Flood Control Projects. Where flood control projects are needed to protect existing development, minimize disruption of streams and riparian systems, maintaining slow flow and stable banks through design and other appropriate mitigation measures. (South County Joint Area Plan 15.08)
NRE-5.6	Stream Channel Protection. Protect existing stream channels and riparian vegetation by requiring buffering or landscaped setbacks and storm runoff interception as specified in Table NRE-1 and consistent with the Santa Clara Valley Habitat Plan.
NRE-6.5	Soil and Erosion. Require development to be designed to conserve soil and avoid erosion. (South County Joint Area Plan 13.06)
NRE-6.A	Standard Measures for Construction Activities. Develop a set of standard measures requiring construction activities to avoid disturbance to natural features to the extent feasible.
NRE-7.A	Infrastructure Maintenance. Correct known deficiencies in the City's sewer, storm drain, and water systems and work toward environmentally sustainable systems. Maintain the City's infrastructure to ensure that facilities are up to date and incorporate efficiency and conservation mechanisms.
NRE-8.1	Contamination from Toxic Chemicals. Protect water quality from contamination, and monitor it to assure that present policies and regulations are adequate. Prohibit such uses as waste facilities, septic systems, and industries using toxic chemicals where polluting substances may come in contact with groundwater, floodwaters, and creeks or reservoir waters. (South County Joint Area Plan 8.00)
NRE-8.2	Septic Systems. Continue land use policies that limit the number of individual septic systems in areas vulnerable to groundwater contamination, because of the potential for cumulative degradation of water quality. (South County Joint Area Plan 8.01)
NRE-8.3	Water Quality Monitoring. Continue to monitor groundwater and surface water quality conditions to determine if changes in regulations regarding septic systems and land use are needed. (South County Joint Area Plan 8.04)
NRE-8.4	Sewer Service for Future Development. In areas where future development is expected to be served by sewers, continue large lot policies which allow minimal development and limited numbers of septic systems. (This approach increases the feasibility of designing future urban density subdivisions with smaller lots, which are more efficient for sewers in terms of service and cost.) (South County Joint Area Plan 8.02)
NRE-8.6	Percolation Rates. Protect properties located in areas that have soils with rapid water percolation from future development in order to ensure existing water quality. Permit development (including commercial and industrial uses) in such areas only under strict safety limitations according to the City's Hazardous Materials Storage Ordinance

Morgan Hill 2035 General Plan Policies: Hydrology and Water Quality

Policy	Description
	section specifically related to high percolation rates. (South County Joint Area Plan 8.11 & 8.12)
NRE-8.7	Aquifer Protection. In order to provide greater protection of the aquifers which supply drinking water to the South County, give special consideration to the management of contaminants (e.g., hazardous materials, sanitary effluents) in groundwater recharge areas where no protective aquitard layer exists. (South County Joint Area Plan 8.13)
NRE-8.8	Water Quality Compliance. Implement Best Management Practices to improve water quality, in conformance with the South Santa Clara County and City of Morgan Hill Total Maximum Daily Load (TMDL) Monitoring Plan for the Pajaro River Watershed (2015) and findings in subsequent annual status updates, as required for compliance with community standards and applicable State and federal provisions.
NRE-9.1	Interjurisdictional Coordination. Maintain close coordination with the following agencies and organizations which share jurisdiction and interest relative to South County's water supply and water quality: the Regional Water Quality Control Boards, Santa Clara Valley Water District, Santa Clara County, City of Gilroy Planning Department, and San Martin Planning Committee. (South County Joint Area Plan 10.02)
NRE-9.2	Water Board Standards. Encourage the two Regional Water Quality Control Boards which have jurisdiction in South County to agree upon compatible water quality standards and consistent approaches to implementing the State Board's nondegradation policy, so as not to confuse developers and jurisdictions which must carry out the Board's regulations. (South County Joint Area Plan 10.01)
NRE-9.4	Compatibility of Regulations. Where appropriate, the Regional Water Quality Boards, Cities, County and other local agencies should adopt compatible ordinances (i.e., Hazardous Materials Storage Ordinance's HMSOs), standards (i.e., septic tank and alternative treatment and disposal methods), and enforcement procedures (i.e., implementing AB 2185, California Health and Safety Code Chapter 6.95, Division 20, Section 25500 et seq.) regarding water quality so that there is no advantage for a company to locate in an area with lower standards. (South County Joint Area Plan 10.03)
NRE-9.A	Intergovernmental Coordination. Consider intergovernmental coordination between the Cities, the County, and local agencies as an effective means of resolving issues of concern and investigating the feasibility of compatible standards, ordinances, and enforcement procedures. (South County Joint Area Plan 10.00)
SSI-1.1	New Development and Hazards. New development should avoid hazardous and sensitive areas, and should occur only where it can be built without risking health and safety. New habitable structures should not be allowed in areas of highest hazard, such as floodways, active landslides, active fault traces, and airport safety zones. In areas of less risk, development should be limited and designed to reduce risks to an acceptable level. (South County Joint Area Plan 15.00)
SSI-1.2	Hazard Reporting. Known or potential geologic, fire, and flood hazards shall be disclosed as part of every real estate transaction and recorded on documents to be reported for building permits, subdivisions, and land development reports. Mitigation of hazards shall be noted in the same manner.

Morgan Hill 2035 General Plan Policies: Hydrology and Water Quality

Policy	Description
SSI-1.B	Current Information. Coordinate with local, regional, State, and federal sources to ensure the City maintains complete and current GIS information on fire, flood, and geotechnical hazards
SSI-2.7	Landslides. Prohibit development on known active landslides and limit development in areas where such development might initiate sliding or be affected by sliding on adjacent parcels. (South County Joint Area Plan 15.02c)
SSI-2.8	Runoff and Slope Stability. Prohibit development in areas where increased runoff from the addition of impervious surfaces and drainage would increase the probability of downslope landsliding, or where additional projects would add to the cumulative effect of increased runoff, unless a downslope drainage improvement plan has been approved. (South County Joint Area Plan 15.02d)
SSI-5.1	Development in Floodways and Floodplains. Prohibit development in floodways and regulate development in floodplains to minimize flood damage and be consistent with the federal flood insurance program. (South County Joint Area Plan 15.05)
SSI-5.2	Private Development in Flood-Prone Areas. If development is allowed in flood-prone areas, provide flood control facilities or appropriate flood-proofing prior to or in conjunction with development at developers' expense. (South County Joint Area Plan 12.05)
SSI-5.3	<p>Flood Clearance. Prior to the start of construction, a Flood Clearance shall be obtained from the Floodplain Administrator for the City of Morgan Hill that provides plans drawn to scale showing the nature, location, dimensions, and elevation of the area; existing or proposed structures, fill, storage of material, and drainage facilities, and floodproofing provisions. Specifically, the following information shall be required:</p> <ul style="list-style-type: none"> • Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all structures • Proposed elevation in relation to mean sea level to which any structure will be floodproofed. • Appropriate elevation and floodproofing certifications. • Description of the extent to which any water course will be altered or relocated as a result of the proposed development. <p>New residential buildings in the 100-year floodplain shall have their lowest floor elevation (excluding garage) floodproofed or raised a minimum of 1 foot above the base flood elevation (BFE). Substantially improved structures within the 100-year floodplain shall meet the same floodplain construction requirements as new buildings.*</p>
SSI-5.4	Floodwater Diversion. Require that new developments within flood hazard areas are done in a manner that will not cause floodwaters to be diverted onto adjacent property or increase flood hazards to properties located elsewhere unless secured through a flood easement or fee title buyout.
SSI-5.5	Off-Site Impacts. Require all local development to provide appropriate mitigation of off-site flooding impacts, including limiting runoff to predevelopment levels and/or complete solutions to flooding and local drainage problems in the vicinity of the development, using such methods as detention or retention. (South County Joint Area Plan 12.08)

Morgan Hill 2035 General Plan Policies: Hydrology and Water Quality

Policy	Description
SSI-5.6	New Development in Hazard Areas. Consider risk of flood hazards and damage in new development proposals within flood hazard areas. Ensure that new construction is consistent with federal flood protection regulations.
SSI-5.8	Water District Project Review. Send all subdivisions and private and public project referrals where activity is located near to floodplain areas to Santa Clara Valley Water District for review prior to City approval.
SSI-5.9	Riparian Natural Functions. Restore and maintain the natural functions of riparian corridors, creeks, and channels to reduce flooding, convey stormwater flows, and improve water quality.
SSI-5.10	Development along Reservoirs. Limit development along the shores of reservoirs which can be expected to sustain damage from seismically induced seiche waves. (South County Joint Area Plan 15.6)
SSI-5.11	New Development in Dam Inundation Areas. Consider risk of dam inundation in new development proposals within the Anderson, Chesbro, and Coyote dam inundation areas.
SSI-5.13	Public Facilities Location. Locate, when feasible, new public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communication facilities or identify construction methods or other methods to minimize damage if these facilities are located in flood hazard zones.
SSI-5.14	Evacuation and Rescue Maps. Maintain, update, and make available to the public, as appropriate, community flood evacuation and rescue maps.
SSI-5.A	Floodway and Floodplain Dedication. Continue to require dedication of floodway and floodplain areas pursuant to the PL566 Drainage Program.
SSI-5.C	Critical Facilities. Conduct a study to identify critical facilities, such as levees, in flood hazard areas and within the dam inundation area, and seek ways to improve their level of protection, if possible.
SSI-6.1	Flood Control Projects. Minimize disruption of natural riparian areas by flood control projects needed to protect presently existing development by maintaining slow flow and stable banks through design and other appropriate mitigation measures. (South County Joint Area Plan 15.08)
SSI-6.2	Minimize Future Flood Control Costs. As flooding affects substantial areas of South County and the flood control projects now being constructed are designed to protect only existing developed and currently planned urban areas, manage land development to mitigate flooding problems and minimize the need for local public funding for additional flood control and local drainage facilities. (South County Joint Area Plan 12.00)
SSI-6.3	Existing and Planned Development. Areas which are developed or planned for development should be protected by the construction of flood control facilities. (South County Joint Area Plan 12.00)
SSI-6.4	Flood Protection Priority. Give highest priority for construction of flood protection facilities as follows: 1) to areas of existing development subject to the highest potential flood damage; 2) to undeveloped areas planned for urban development which would be

Morgan Hill 2035 General Plan Policies: Hydrology and Water Quality

Policy	Description
	subject to the highest potential of flood damage; 3) to agricultural lands; and 4) to other undeveloped areas. (South County Joint Area Plan 12.01)
SSI-6.5	Flood Risks. Work with the Santa Clara Valley Water District and other agencies with the responsibility for flood protection to reduce flooding risks in Morgan Hill.
SSI-6.6	Flood Management Design. Encourage flood management designs that respect the natural topography and vegetation of waterways while retaining dynamic flow and functional integrity.
SSI-6.7	Urban Creeks and Channels. Preserve the existing floodplain capacity of urban creeks and channels
SSI-6.8	Increased Capacity. Encourage increased stormwater and flood management infrastructure capacity in order to accommodate changes in climate, precipitation, and extreme weather events.
SSI-13.2	System Assessment. Evaluate the capacity and condition of water, wastewater, and stormwater facilities on a regular basis to assess each system's ability to withstand increased wet and dry weather events, meet changes in demand, and determine system deficiencies.
SSI-13.D	Inspections. Regularly inspect infrastructure more vulnerable to storms (e.g., wooden utilities poles) to ensure reliability during storm events.
SSI-14.1	Efficient Water Management. Manage the supply and use of water more efficiently through appropriate means, such as watershed protection, percolation, conservation, and reclamation. (South County Joint Area Plan 7.00)
SSI-14.6	Well Pumping. Support cooperation among all jurisdictions and agencies pumping water from wells in order to manage the aquifer to preserve the natural ecology of the region, secure the aquifer's utility as a water resource, and ensure the water's quality. (South County Joint Area Plan 7.04)
SSI-14.7	Water District Programs. Encourage the Santa Clara Valley Water District to continue developing programs to assure effective management of water resources, such as well monitoring, percolation of imported water, reclamation, and conservation. (South County Joint Area Plan 7.07)
SSI-14.9	Well Monitoring. Continue to monitor wells and provide the results to the Santa Clara Valley Water District which would coordinate the data and make it available to all jurisdictions and agencies. (South County Joint Area Plan 8.14)
SSI-14.11	Urban Encroachment. Protect streambeds and other appropriate percolation areas from encroachment by urban development. (South County Joint Area Plan 7.05)
SSI-14.E	San Felipe Water. Continue coordination among the South County jurisdictions and the Santa Clara Valley Water District to ensure that the South County will get sufficient deliveries of San Felipe water as needs require. (South County Joint Area Plan 7.06)
SSI-14.H	Monitoring Programs. Work with other South County jurisdictions to track existing water quality, water supply, and water flow monitoring programs. This information should be used to evaluate current regulations and procedures, and to assess the need for new monitoring programs or for revisions or consolidation of existing programs. (South County Joint Area Plan 7.02)
SSI-14.I	Water District Programs. Work with the Santa Clara Valley Water District to encourage water use efficiency and conservation programs for residences, businesses,

Morgan Hill 2035 General Plan Policies: Hydrology and Water Quality

Policy	Description
	and agriculture and to increase public awareness of the need for efficient management of water resources, including but not limited to, conservation and reuse practices.
SSI-16.1	Drainage Facilities Payment. Ensure that those residents who benefit from, as well as those who contribute to the need for, local drainage facilities pay for them. (South County Joint Area Plan 13.02)
SSI-16.2	Drainage System Capacity. Ensure that the level of detention or retention provided on the site of any new development is compatible with the capacity of the regional storm drainage system.
SSI-16.3	Stormwater Management Plans. Require a storm water management plan for each proposed development, to be presented early in the development process and describe the design, implementation, and maintenance of the local drainage facilities. (South County Joint Area Plan 13.03)
SSI-16.3	Stormwater Management Plans. Require a stormwater management plan for each proposed development, to be presented early in the development process and describe the design, implementation, and maintenance of the local drainage.
SSI-16.4	Regional System Compatibility. Coordinate with the Santa Clara Valley Water District to ensure compatibility of the local and regional storm drainage systems.
SSI-16.A	Drainage Impacts. Require developers of individual projects to mitigate on- and off-site drainage impacts and, where appropriate, install local drainage facilities which would contribute to an eventual area-wide solution to local drainage problems. (South County Joint Area Plan 13.00)
SSI-16.B	South County Drainage. Work with the City of Gilroy and Santa Clara County to develop a coordinated, interjurisdictional master plan for local drainage in the South County, which includes consideration of the interface between unincorporated areas and City drainage systems. (South County Joint Area Plan 13.04)
SSI-16.C	Drainage Impact Mitigation. Require developers of individual projects to mitigate drainage impacts and protect ground-water quality. Such mitigation may include limiting runoff to predevelopment levels and/or complete solutions to local drainage problems in the vicinity of the development or downstream, possibly using detention or retention methods. (South County Joint Area Plan 13.05)
SSI-16.D	Drainage Maintenance Funding. Since County maintenance is limited to maintaining local storm drainage facilities which may affect County roads, study the available mechanisms for acquiring additional funding from residents and/or developers for any additional storm drain-related maintenance beyond that which is currently provided. (South County Joint Area Plan 13.01)

4.10.1.2 *Existing Conditions*

Hydrology

The City of Morgan Hill is divided into several hydrologically distinct drainage areas, with each having a system of conveyance facilities, pumps, and detention basins to collect and dispose the

runoff. The stormwater runoff from these areas is collected and ultimately discharged into creeks that flow through the city and are tributary to either of the Monterey Bay or San Francisco Bay.⁷²

Watersheds

The Morgan Hill SOI is within the Coyote Creek Watershed that drains to San Francisco Bay and the Uvas-Llagas Watershed that drains to Monterey Bay, with a majority of the Housing Element Update project locations within the Uvas-Llagas Watershed.

Groundwater

The Morgan Hill SOI is located in the Santa Clara Subbasin and the Llagas Subbasin. The Santa Clara Subbasin groundwater is typically found between five and 40 feet below ground surface, while groundwater in the Llagas Subbasin is typically found at 15 feet below ground surface. The City of Morgan Hill's water supply is 100 percent from groundwater with the Santa Clara Subbasin supplying 25 percent and the remaining 75 percent from the Llagas Subbasin.⁷³

Flood Hazard Zones

The Housing Element Update project locations are within the FEMA 100-year (one percent chance of flooding) and 500-year (0.2 percent chance of flooding) flood zones. A majority of the opportunity sites are within the 500-year flood zone. Portions of the following opportunity locations lie within the 100-year flood zone⁷⁴:

- Jarvis-MH Apartments (Braddock & Logan) (Location 8),
- Monterey-City Ventures (Location 7),
- Monterey-First Community Housing (Magnolias) (Location 14),
- APN 726-230-20 (Location 6), and
- Edes-Alcini (TTLC Morgan Hill) (Location 18)

Seiche and Tsunami

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the opportunity project locations that in the event of a seiche would affect the sites. A tsunami is a series of water waves caused by the displacement of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. Neither the Morgan Hill SOI nor the Housing Element Update project locations lie within a tsunami inundation hazard area.⁷⁵ There is very low possibility of a tsunami occurring in Morgan Hill.

⁷² City of Morgan Hill. *2018 Storm Drainage System Master Plan*. September 2018.

⁷³ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Pages 4.9-16 and 4.9-17. January 2016.

⁷⁴ County of Santa Clara. SCCMap. Accessed June 6, 2022. Available at: <https://ges.sccgov.org/discovergis/sccmap>

⁷⁵ California Emergency Management Agency. California Official Tsunami Inundation Map. Accessed September 16, 2021. <https://www.conservation.ca.gov/cgs/tsunami/maps>

4.10.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Hydrology and Water Quality Conclusions

The Morgan Hill 2035 concluded that the construction of future development planned under the General Plan would have less than significant impacts on hydrology and water quality. Future developments would not violate any water quality standards or waste discharge requirements during construction nor operation due to adherence to regional regulations (NPDES, SWPPP, and post-construction RWQCB requirements) and General Plan policies; therefore, impacts would be less than significant. Impacts related to groundwater recharge and groundwater quality would be less than significant due to site design measures that would be required pursuant with the Stormwater Management Guidance for Low Impact Development and Post-Construction Requirements along with the General Plan policies. Implementation of the General Plan would also not alter the existing drainage pattern in a manner that would result in erosion, substantially increase the rate of runoff, create runoff that would exceed the existing stormwater drainage system capacity, or impede or redirect flood flow due to regional and City post-construction requirements and permits that would ensure projects are designed in a manner that they do not significantly impact the drainage patterns on-site. Compliance with General Plan policies would further reduce or minimize these impacts. Therefore, impacts related to drainage patterns would be less than significant. Due to the location of the Morgan Hill SOI, there is no potential for a tsunami to impact the General Plan Area. Additionally, there are no large bodies of water within the Morgan Hill SOI to create a seiche. However, there are portions of the Morgan Hill SOI are within a FEMA 100-year flood zone. Impacts related to flood hazards would be less than significant as future developments located within these zones would be constructed in accordance with the City's Municipal Code 18.42 to minimize flood hazard risks.

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **[Same Impact as Approved Project (Less than Significant Impact)]**

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Construction Impacts

The Morgan Hill 2035 FEIR noted that development associated with the General Plan is generally located in areas with existing impervious surface area, however there are areas that are pervious. Future development could require grading and excavation, which may result in temporary impacts to surface water quality in local waterways. When disturbance to underlying soil occurs, surface water that flows across the site may contain sediments that may be dislodged and discharged to the storm drainage system. Impacts to water quality would be reduced during construction due to compliance with the statewide Construction General Permit (individual projects that would disturb more than one

acre) and implementation of City of Morgan Hill's Erosion and Sediment Control Ordinance and City-approved best management practices.

Future development of the Housing Element Update project locations would be subject to federal, state, and local water quality standards and discharge requirements. The majority of the Housing Element Update project locations would disturb more than one acre (refer to Table 3.4-1) and would be subject to the Construction General Permit. The Construction General Permit requires that a Notice of Intent and Stormwater Pollution Prevention Plan be prepared. In addition, all future development would be required to implement City-approved best management practices, in accordance with City's Erosion and Sediment Control Ordinance, to reduce stormwater pollutants and erosion. For these reasons, the Housing Element Update would not result in new or more severe impacts related to water quality. **[Same Impact as Approved Project (Less than Significant Impact)]**

Post-Construction Impacts

Post-construction stormwater runoff and water quality is regulated through either the Municipal Regional Permit Provision C.3 or the Phase II Small MS4 Permit (dependent on RWQCB jurisdiction), and the City of Morgan Hill's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. The Morgan Hill 2035 FEIR concluded that development in areas draining to Monterey Bay that would create or replace 2,500 square feet or more of impervious surface would be required to comply with the Central Coast RWQCB's Post Construction Requirements and must implement low impact development measures. The Municipal Regional Permit Provision C.3 requires, for areas draining to SF Bay, all post-construction stormwater runoff to be treated by numerically sized LID treatment controls, such as biotreatment facilities, unless the project is granted Special Project LID Reduction Credits, which would allow the project to implement non-LID measures for all or a portion of the site depending on the project characteristics. Adherence to these regulations post-construction would ensure that pollutants do not affect water quality.

Future development on the Housing Element Update project locations within the Central Coast RWQCB (Location 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 16, 17, 18, 19, 20, 21, and 22) that would replace more than 2,500 square feet of impervious surface would be subject to the Central Coast RWQCB's Post Construction Requirements. The Housing Element Update project locations within the San Francisco Bay RWQCB (Location 1, 9, 10, 13, 15) would need to implement LID measures pursuant with the Municipal Regional Permit Provision C.3. Additionally, all development associated with the Housing Element Update would comply with the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements, which would reduce impacts to post-construction water quality to a less than significant level. For these reasons, the Housing Element Update would not result in new or more severe impacts related to water quality. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR concluded that impacts related to groundwater would be less than significant since there is sufficient water supply for normal and multiple-dry year scenarios through the year 2035 (refer to Section 4.19 Utilities and Service Systems) and future developments would comply with General Plan Policies that reduce impacts to groundwater (Policy NRE-8.3, Policy NRE-8.6, Policy NRE-8.7, Policy SSI-14.1, Policy SSI-14.6, Policy SSI-14.7, Policy SSI-14.9, Policy SSI-14.11, Action SSI-14.E, Action SSI-14.H, and Action SSI-14.I). Additionally, as described in Impact HYD-1, new developments would be required to implement site design measures, which includes infiltration features (such as detention basins) that would contribute to groundwater recharge.

Future development under the Housing Element Update would be designed to comply with the site design measures, LID, and BMPs, which include infiltration features such as implement site design measures, LID, and BMPs, which include infiltration features such as detention and retention basins, that would contribute to groundwater recharge and minimize stormwater runoff. With adherence to federal and local regulations and compliance with the General Plan policies, the Housing Element Update would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. For these reasons, the Housing Element Update, would not result in new or more severe impacts to groundwater. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR concluded that buildout of the General Plan would increase impervious surfaces, thereby increasing stormwater runoff volumes and velocities. These impacts would be reduced through compliance with the Construction General Permit and City's Erosion and Sediment Control Ordinance, both of which require the implementation of best management practices to reduce stormwater pollutants and erosion. Future development would also be required to submit an Erosion and Sediment Control Plan for review and approval by the Director of Public Works prior to the issuance of a grading permit. Following construction, buildout under the General Plan that would create or replace 2,500 square feet or more of impervious surface would be required to comply with the Central Coast RWQCB's Post Construction Requirements or be required to comply with the San Francisco Bay RWQCB Municipal Regional Permit Provision C.3. The Housing Element Update project locations in both RWQCB jurisdictions must implement low impact development measures.

Additionally, compliance with the General Plan policies and actions (Policy NRE-5.5, Policy NRE-5.6, Policy NRE-6.5, and Action NRE-6.A) would reduce impacts regarding erosion and siltation.

Future development under the Housing Element Update would be subject to the federal and local regulatory requirements described above, which would require adherence to the City's required best management practices, preparation of a SWPPP, and submittal of an Erosion and Sediment Control Plan. For these reasons, the Housing Element Update, would not result in new or more severe impacts to drainage pattern and runoff. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HYD-4: The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **[Same Impact as Approved Project (Less than Significant Impact)]**

Flooding

As described in the Morgan Hill 2035 FEIR, implementation of the General Plan buildout could result in development located within an existing FEMA 100-year floodplain, which is a special flood hazard area. Pursuant with Morgan Hill Municipal Code 15.80, Flood Damage Prevention, the plans for future developments within a 100-year flood plain would be reviewed by the City prior to receiving building permits to ensure the building is consistent with the construction requirements. General Plan Policies would also require specific design features, such as Policy SSI-5.3, which has requirements for the lowest floor elevation. Compliance with the Morgan Hill Municipal Code and General Plan policies would reduce impacts to less than significant. For future development sites located in a FEMA 100-year flood zone, where there is a 1 percent annual chance of flooding, the future development would need to comply with the City's Municipal Code Chapter 15.80, *Flood Damage*, to minimize flood hazard risks. General Plan policies and actions would also reduce potential impacts for residences located within the 100-year flood zone (Policy NRE-5.5, Policy SSI-1.2, Action SSI-1B, Policy SSI-5.1, Policy SSI-5.2, Policy SSI-5.3, Policy SSR-5.4, Policy SSI-5.5, Policy SSI-5.6, Policy SSI-5.7, Policy SSI-5.8, Policy SSI-5.12, Policy SSI-5.12, Action SSI-5.A, Action SSI-5.C, Policy SSI-6.1, Policy SSI-6.2, Policy SSI-6.3, Policy SSI-6.4, Policy SSI-6.5, Policy SSI-6.6, Policy SSI-6.7, and Policy SSI-6.8).

As described in Section 4.10.1.2 Existing Conditions, there are Housing Element project locations (Location 6, 7, 8, 14, and 18) within the 100-year flood zone. Adherence to the Morgan Hill Municipal Code (Chapter 15.80) and General Plan policies described above, would ensure that developments are designed to reduce potential risk from flood, both by elevating residences above the based flood elevation and by ensuring development does not redirect, impede, or displace floodwaters in a manner that would impact surrounding properties and improvements. Also the residential developments proposed under the Housing Element Update would not store substantial quantities of chemicals or other pollutant that would be at risk of release due to inundation during a flood. Therefore, the Housing Element Update would not risk release of pollutants due to inundation from flooding. For these reasons, the Housing Element Update would not result in new or more severe impacts related to flood hazards. **[Same Impact as Approved Project (Less than Significant Impact)]**

Tsunami and Seiche Risk

As described in the Morgan Hill 2035 FEIR, there is no potential that the General Plan buildout, which includes the various Housing Element project locations, would be impacted by a tsunami due to the distance of the Morgan Hill SOI and the Pacific Ocean. Anderson Dam is temporarily drained (limited to about three percent of its capacity) while the Anderson Dam Seismic Retrofit Project is underway.⁷⁶ Upon completion of the retrofit, there would be low potential for a seiche to form on the Anderson Reservoir, thus the flooding impacts from a seiche are highly unlikely. Impacts related to tsunamis and seiche risk would be less than significant. Therefore, the Housing Element Update would not result in new or more severe impacts related to tsunami and seiche risk. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact HYD-5: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **[Same Impact as Approved Project (Less than Significant Impact)]**

As described in Impacts HYD-1 through HYD-4, buildout under the General Plan (including the Housing Element Update) must comply with federal and local regulations that address construction- and operational-related surface runoff quality. Thus, the Housing Element Update would not conflict with or obstruct implementation of the Central Coast Basin Plan.

The Housing Element project locations are within the Santa Clara Plain groundwater subbasin and this subbasin has not been identified in the GWMP as being overdrafted. Implementation of the Housing Element Update would not interfere with any actions set forth by Valley Water in its GWMP in regards to groundwater recharge, transport of groundwater, and/or groundwater quality. In addition, as discussed under Impact HYD-2, the Housing Element Update would not substantially decrease groundwater supplies or interfere with groundwater recharge. **[Same Impact as Approved Project (Less than Significant Impact)]**

⁷⁶ Valley Water. “Anderson Dam Seismic Retrofit Project.” Accessed August 29, 2022. <https://www.valleywater.org/project-updates/c1-anderson-dam-seismic-retrofit>

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to land use and planning. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Land Use

Policy	Description
CNF-9.1	Density Feathering from High to Low Densities. Encourage feathering from higher urban densities to lower rural densities to occur within the City limits. Feathering should begin as development nears the Urban Growth Boundary.
CNF-17.3	Buffer between Industrial and Incompatible Uses. Ensure that all individual uses are well sited and buffered from incompatible uses; buffers may include offices adjacent to sensitive uses, landscaping, berms, etc.
CNF-8.1	High Quality Design. Require all development to feature high quality design that enhances the visual character of Morgan Hill.
CNF-8.3	Changes in Building Scale. Discourage abrupt changes in building scale. A gradual transition between low-rise to mid-rise buildings should be achieved by using the low-rise buildings at the edge of the project site. Consider the relationship of buildings to the street, to one another and to adjacent structures and land uses.
CNF-8.7	Design Sensitivity. Ensure that new development is sensitive to the character of adjacent structures and the immediate neighborhood.
CNF-8.12	Visual Impact of Parking. Require parking areas associated with development to be located and designed to minimize visual impact to the greatest extent feasible. This may include locating parking behind buildings street frontage, below grade, or screening through the use of natural landscaping
CNF-8.19	Incompatible Uses. Use setbacks, natural and man-made barriers such as streams, park land, and drainage ways, and other mitigation to separate incompatible uses whenever possible.
CNF-9.1	Density Feathering from High to Low Densities. Encourage feathering from higher urban densities to lower rural densities to occur within the City limits. Feathering should begin as development nears the Urban Growth Boundary.
CNF-11.1	Preservation of Single-Family Neighborhoods. Encourage preservation and rehabilitation of single-family neighborhoods within the City.
CNF-11.2	Well-Designed Residential Neighborhoods. Design residential neighborhoods so they are distinct and buffered from conflicting nonresidential uses.
CNF-11.3	Appropriate Residential Transitions. Provide for an acceptable transition in lot size and density between adjacent residential areas.

Morgan Hill 2035 General Plan Policies: Land Use

Policy	Description
CNF-11.20	<p>Infill Compatibility. Require residential infill development to complement existing development patterns and minimize impacts on neighboring properties. This may be accomplished by:</p> <ul style="list-style-type: none"> • Matching prevailing front and side setbacks on developed blocks. • Breaking up large buildings into smaller forms reflective of the scale of nearby structures. • Stepping back upper stories of taller structures. • Using porches or balconies to counteract the vertical emphasis of taller buildings. • Using trees and landscaping to soften scale differences, particularly in areas where trees and vegetation are unifying aspects of community character.
CNF-11.22	<p>Minimized Mass and Scale. Minimize the perceived mass and scale of attached single-family homes and multi-family housing to appear consistent with Morgan Hill's small town residential character. This may be accomplished by: <input type="checkbox"/> Breaking larger buildings up into multiple masses and adding visual breaks in building volumes.</p> <ul style="list-style-type: none"> • Providing separation between individual buildings within a single project. • Including paseos, courtyards, plazas and other forms of open space that help to break up building mass. • Utilizing landscaping that helps to soften the visual impact of larger buildings.
CNF-12.1	<p>Neighborhood Center Design. Allow neighborhood centers within future residential neighborhoods. Neighborhood centers are envisioned as nodes or focal points that offer neighborhood-serving services and amenities within a reasonable walking distance from adjoining residential areas. These centers should be designed to increase the accessibility of goods and services within existing residential neighborhoods, particularly for the benefit of senior citizens and those with limited mobility, and to offer opportunities for socialization.</p>
CNF-12.2	<p>Well-connected Neighborhood Centers. Provide for safe and convenient pedestrian and bicycle connections as well as transit access to support existing neighborhood centers, including shopping centers, medical offices, sports fields, and the Centennial Recreation Center.</p>
CNF-13.2	<p>Density Feathering. Encourage the feathering of land use densities and intensities from high to low along Monterey Road with higher intensity land uses located adjacent to Downtown.</p>
CNF-13.4	<p>Block-level Master Plans. Require mixed use flex developments to prepare block-level master plan to ensure well-planned development</p>
CNF-20.1	<p>East of 101 Area Land Use Planning. Require the preparation of a comprehensive master plan when new residential development is proposed in the East of 101 Area Plan Overlay district.</p>
CNF-20.3	<p>East of 101 Area Design. Require new residential development to be designed to minimize adverse impacts on adjacent residential and agricultural uses.</p>

4.11.1.2 *Existing Conditions*

The Housing Element project locations have a General Plan designation of Mixed Use (MU), Mixed Use Flex (MUFlex), Residential Attached Low (RAL), Residential Attached Medium (RAM),

Residential Detached Low (RDL), Residential detached Medium (RDM), and Residential Estate (RE).

The Housing Element project locations are zoned Service Commercial Planned Development Combining District (CS), Downtown Mixed Use (MU-D), Mixed Use Flex (MU-F), Neighborhood Mixed Use (MU-N), Planned development Combining District (PD), Planned Unit Development (PUD), Residential Attached Low Density 3,000 square feet per unit (RAL 3,000), Residential Attached Low Density 3,500 square feet per unit (RAL-3,500), Residential Attached Medium Density (RAM), Residential Detached Low Density 12,000 square feet lots (RDL 12,000), Residential Detached Low Density 20,000 square feet lots (RDL 20,000), Residential Detached Medium Density 7,000 square feet lots (RDM 7,000), Residential Detached Medium Density (RDM 9,000), and Residential Estate 1 acre lots (RE 1).

Refer to Table 3.4-1 in Section 2.0 Project Description for the General Plan and zoning designation for each of the project locations.

4.11.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Land Use and Planning Conclusions

The Morgan Hill 2035 FEIR concluded that the buildout of developments proposed under the General Plan would not divide established communities or neighborhoods since the developments would be consistent with existing development patterns and be subject to the General Plan policies that encourage cohesive neighborhoods. Impacts would be less than significant. Developments under the General Plan would also not conflict with land use plans or policies since the General Plan policies would support the applicable plan and/or further promote land use consistency. Therefore, impacts related to land use plans or policies would be less than significant.

Impact LU-1: The project would not physically divide an established community. **[Same Impact as Approved Project (Less than Significant)]**

A significant impact would occur if new development would physically divide an established community by constructing a physical feature (such as a wall, roadway, or railroad track) or by removing a mean of access (such as a local roadway or bridge) that would impair mobility within an existing community or between communities. As described in the Morgan Hill 2035 FEIR, buildout

of the General Plan Buildout (including the Housing Element Update) would not include roadways or dividing infrastructure. Future development would be required to be consistent with General Plan policies that promote compatible neighborhoods (Policy CNF-8.1, Policy CNF-8.3, Policy CNF-8.7, Policy CNF-8.12, Policy CNF-8.19, Policy CNF-9.1, Policy CNF-11.1, Policy CNF-11.2, Policy CNF-11.3, Policy CNF-11.20, Policy CNF-11.22, Policy CNF-12.1, Policy CNF-13.1, Policy CNF-13.2, Policy CNF 13.4, Policy CNF-20.1, and Policy CNF-20.3). Adherence to these General Plan policies would ensure that residential developments proposed under the Housing Element Update would not divide existing residential neighborhood or communities. Therefore, the Housing Element Update would not result in new or more severe impacts as disclosed in the Morgan Hill 2035 FEIR.

[Same Impact as Approved Project (Less than Significant)]

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **[Same Impact as Approved Project (Less than Significant)]**

Land use conflicts can arise from a new development or land use that would cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisance to potentially significant effects on human health and safety. The Morgan Hill 2035 FEIR concluded that implementation of the General Plan and its policies would not conflict with any land use plan, policy or regulation (including Plan Bay Area, the Santa Clara County General Plan, San County Airport Land Use Compatibility Plan, and the Santa Clara Valley Water District Resources Protection Collaborative Guidelines and Standards for Land Use near Streams).

The Housing Element project locations are consistent with the General Plan land use designations and zoning districts.⁷⁷ No General Plan Amendments to the Land Use Diagram are proposed as part of the Housing Element. The Housing Element Update's conformance with various City policies adopted for the purpose of avoiding or mitigating an environmental effect is discussed in various other sections of this Initial Study/Addendum (e.g., Section 4.3 Air Quality, Section 4.4 Biological Resources, Section 4.9 Hazards and Hazardous Materials, and Section 4.13 Noise). There are no additional policies pertaining specifically to land use and planning that were adopted for the purpose of avoiding or mitigating an environmental effect. For these reasons, the Housing Element Update would not create a significant environmental impact or create a conflict with any plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Housing Element Update would not result in new or more severe impacts as disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant)]**

⁷⁷ On November 23, 2021, the City approved a Design Permit and Conditional Use Permit for the Monterey - First Community Housing project (Site 14). The 100 percent affordable project was processed pursuant to State Density Bonus Law and SB 330, which allowed for increased density beyond what is allowed in the MUFlex designation. Because the residential units would be 100 percent deed restricted affordable housing for lower income households, the City determined that with the approval of the density bonus, the project is consistent with the Zoning Ordinance and General Plan.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

California Geological Survey

As mandated by SMARA, the CGS has classified lands within the San Francisco-Monterey Bay region into Mineral Resource Zones (MRZs) based on the California State Mining and Geology Board guidelines. Areas with an MRZ-1 designation have sufficient information available indicating that there is little to no likelihood of significant mineral deposits. MRZ-2 areas are areas where adequate information indicates that significant deposits are present. Areas classified as MRZ-3 contain mineral deposits, but their significance cannot be evaluated from available data. Areas are classified as MRZ-4 where available information is inadequate for assignment to any other MRZ category.⁷⁸

4.12.1.2 *Existing Conditions*

There are three areas within Morgan Hill classified as MRZ-3 zones, including the flood plains of Coyote Creek, the Franciscan Complex greenstone located at two small knolls near Anderson dam and an area near Coyote Creek, and two-small areas that lie on each side of a northwest-trending ridge that forms the western bank of Anderson Lake.⁷⁹

⁷⁸ California Department of Conservation. *Guidelines for Classification and Designation of Mineral Lands*. N.d.

⁷⁹ City of Morgan Hill. Morgan Hill 2035 DEIR. Page 7-1. January 2016.

4.12.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Mineral Resources Conclusions

The Morgan Hill 2035 FEIR concluded that there would be no impacts related to mineral resources due to the buildup of the General Plan. The Morgan Hill SOI is largely urbanized and no mineral resource protection areas are within the General Plan area.

Impact MIN-1: The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **[Same Impact as Approved Project (No Impact)]**

Impact MIN-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. **[Same Impact as Approved Project (No Impact)]**

As described in Section 4.12.1.2 Existing Conditions, there are three areas within Morgan Hill classified as MRZ-3 zones, including the flood plains of Coyote Creek, the Franciscan Complex greenstone located at two small knolls near Anderson dam and an area near Coyote Creek, and two-small areas that lie on each side of a northwest-trending ridge that forms the western bank of Anderson Lake. None of the Housing Element Update project locations are located in these areas. For these reasons, implementation of the Housing Element Update would not result in new or substantially more severe impacts to mineral resources than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (No Impact)]**

4.13 NOISE

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq} , DNL, or CNEL.⁸⁰ These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne

⁸⁰ L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria			
Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual*. September 2018.

State and Local

California Building Standards Code

The California Building Code establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to noise and vibration. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Noise and Vibration

Policy	Description
SSI-8.1	<p>Exterior Noise Level Standards. Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (as shown in Table SSI-1) as follows:</p> <ul style="list-style-type: none"> • Apply a maximum exterior noise level of 60 dBA L_{dn} in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing a L_{dn} of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, a L_{dn} of 65 dBA may be permitted.

Morgan Hill 2035 General Plan Policies: Noise and Vibration

Policy	Description
SSI-8.2	Impact Evaluation. The impact of proposed development projects on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.
SSI-8.5	Traffic Noise Level Standards. Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn} , or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.
SSI-8.6	Stationary Noise Level Standards. Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.
SSI-8.7	Other Noise Sources. Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.
SSI-8.9	Site Planning and Design. Require attention so site planning and design techniques other than sound walls to reduce noise impacts, including: a) installing earth berms; b) increasing the distance between the noise source and the receiver; c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas; d) orienting buildings to shield outdoor spaces from the noise source; and e) minimizing the noise at its source.
SSI-9.1	Techniques to Reduce Traffic. Use roadway design, traffic signalization, and other traffic planning techniques (such as limiting truck traffic in residential areas) to reduce noise caused by speed or acceleration of vehicles.
SSI-9.3	Sound Wall Design. The maximum height of sound walls shall be eight feet. Residential projects adjacent to the freeway shall be designed to minimize sound wall height through location of a frontage road, use of two sound walls or other applicable measures. Sound wall design and location shall be coordinated for an entire project area and shall meet Caltrans noise attenuation criteria for a projected eight-lane freeway condition. If two sound walls are used, the first shall be located immediately adjacent to the freeway right-of-way and the second shall be located as necessary to meet Caltrans noise requirements for primary outdoor areas. The minimum rear yard setback to the second wall shall be 20 feet.
SSI-9.5	Noise Studies for Private Development. In order to prevent significant noise impacts on neighborhood residents which are related to roadway extensions or construction of new roadways, require completion of a detailed noise study during project-level design to quantify noise levels generated by projects such as the Murphy Avenue extension to Mission View Drive and the Walnut Grove Extension to Diana Avenue. The study limits should include noise sensitive land uses adjacent to the project alignment as well as those along existing segments that would be connected to new segments. A significant impact would be identified where traffic noise levels would exceed the “normally acceptable” noise level standard for residential land uses and/or where ambient noise levels would be substantially increased with the project. Project specific mitigation measures could include, but not be limited to, considering the location of the planned roadway alignment relative to existing receivers in the vicinity, evaluating the use of noise barriers to attenuate project-generated traffic noise, and/or evaluating the use of “quiet pavement” to minimize traffic noise levels at the source. Mitigation should be designed to reduce noise levels into compliance with “normally acceptable” levels for residential noise and land use compatibility.

Morgan Hill 2035 General Plan Policies: Noise and Vibration

Policy	Description
SSI-9.6	Earth Berms. Allow and encourage earth berms in new development projects as an alternative to sound walls if adequate space is available.
SSI-9.7	Sound Barrier Design. Require non-earthen sound barriers to be landscaped, vegetated, or otherwise designed and/or obscured to improve aesthetics and discourage graffiti and other vandalism.

City of Morgan Hill Municipal Code

The City of Morgan Hill's Municipal Code Chapter 8.28 states that "It is unlawful and a misdemeanor for any person to make or continue, or cause to be made or continued, any loud, disturbing, unnecessary or unusual noise or any noise which annoys, disturbs, injures or endangers the comfort, health, repose, peace or safety of other persons within the city." The following sections of the code would be applicable to the project:

1. Construction activities as limited below. "Construction activities" are defined as including but not limited to excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of seven a.m. and eight p.m., Monday through Friday and between the hours of nine a.m. to six p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including but not limited to landowners, construction company owners, contractors, subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership, control or direction to violate this provision. Construction activities may occur in the following cases without violation of this provision:
 - a. In the event of urgent necessity in the interests of the public health and safety, and then only with a permit from the chief building official, which permit may be granted for a period of not to exceed three days or less while the emergency continues and which permit may be renewed for periods of three days or less while the emergency continues.
 - b. If the chief building official determines that the public health and safety will not be impaired by the construction activities between the hours of eight p.m. and seven a.m., and that loss or inconvenience would result to any party in interest, the chief building official may grant permission for such work to be done between the hours of eight p.m. and seven a.m. upon an application being made at the time the permit for the work is issued or during the progress of the work.
 - c. The city council finds that construction by the resident of a single residence does not have the same magnitude or frequency of noise impacts as a larger construction project. Therefore, the resident of a single residence may perform construction activities on that home during the hours in this subsection, as well as on Sundays and

federal holidays from nine a.m. to six p.m., provided that such activities are limited to the improvement or maintenance undertaken by the resident on a personal basis.

- d. Public work projects are exempt from this section and the public works director shall determine the hours of construction for public works projects.
2. If it is determined necessary in order to ensure compliance with this section, the chief building official may require fences, gates or other barriers prohibiting access to a construction site by construction crews during hours in which construction is prohibited by this subsection. The project manager of each project shall be responsible for ensuring the fences, gates or barriers are locked and/or in place during hours in which no construction is allowed. This subsection shall apply to construction sites other than public works projects or single dwelling units which are not a part of larger projects.

Chapter 18.76 establishes quantitative noise performance standards:

1. No land use or activity may produce a noise level in excess of the standards in Table 4.13-2.
2. Noise standards in Table 4.13-2 do not apply to noise generated by vehicle traffic in the public right-of-way or from temporary construction, demolition, and vehicles that enter and leave the site of the noise-generating use (e.g., construction equipment, trains, trucks).
3. All uses and activities shall comply with Municipal Code Chapter 8.28 (Noise).

Table 4.13-2: Municipal Code Maximum Noise Levels	
Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi-Public	60 dBA

Notes: The planning commission may allow an additional five dBA noise level at the lot line if the maximum noise level shown cannot be achieved with reasonable and feasible mitigation.

4.13.1.3 Existing Conditions

The predominant noise source in proximity to the Housing Element Update project locations is vehicular traffic on major roadways. The largest roadway noise contributors include Highway 101, Monterey Road, Butterfield Boulevard, Cochrane Road, Main Avenue, Dunne Avenue, Edmundson Avenue, Tennant Avenue, and Watsonville Road.

Existing noise conditions were collected during a noise monitoring survey completed for the Morgan Hill 2035 FEIR. The survey consisted of eight short-term and three long-term noise measurements located throughout the City limits. The noise measurements in proximity to the proposed opportunity locations were used to represent the existing conditions.

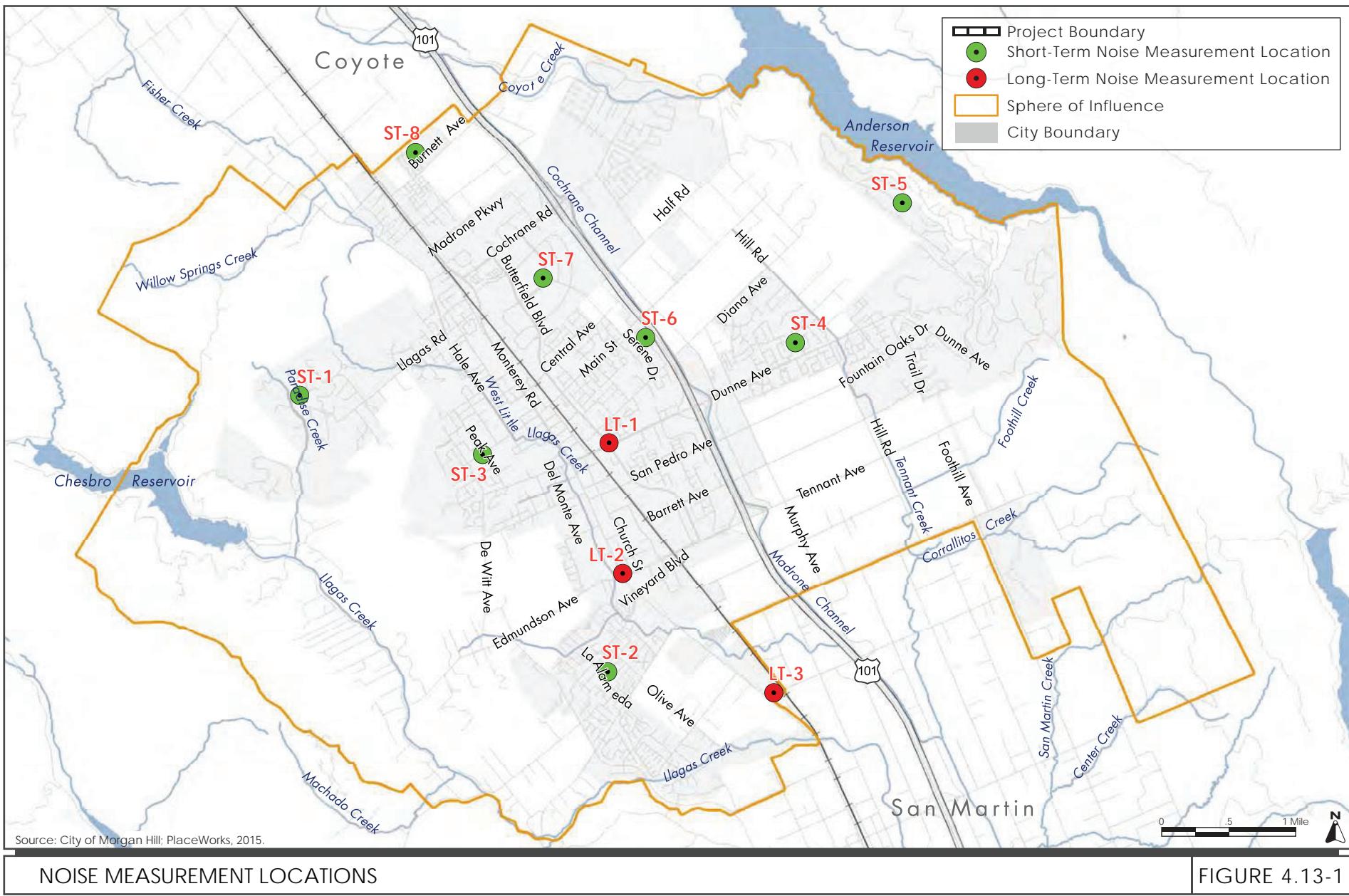
Hourly average noise levels based on L-1 (intersection of Butterfield Boulevard and East Dunne Avenue) range from 58 to 72 Leq during daytime hours.

Short-term noise measurements were made at eight locations for 15-minute intervals. Passenger cars generated the majority of the noise at the short-term measurement locations. The representative short-term noise measurements are ST-2, ST-3, ST-6, and ST-8. The results of the short-term measurements are shown in Table 4.13-3.

Table 4.13-3: Summary of Short-Term Noise Measurements (dBA)				
Noise Measurement Location	Date, Time	L_{eq}	L_{min}	L_{max}
ST-2	August 27, 2:48 p.m.	45	38	56
ST-3	August 27, 3:44 p.m.	66	54	81
ST-6	August 28, 12:12 p.m.	57	53	63
ST-8	August 28, 2:00 p.m.	44	39	53

Notes:
 L_{eq} = The average A-weighted noise level during the measurement period (15-minute interval).
 L_{min} = The minimum A-weighted noise level during the measurement period
 L_{max} = The maximum A-weighted noise level during the measurement period.
Source: City of Morgan Hill, *Morgan Hill 2035 EIR*, Table 4.11-5. January 2016.

Common vibration sources include, but are not limited to, railroads, airport runways, and heavy earth-moving equipment. Sources of vibration near Housing Element Update project locations include the Union Pacific rail line, which is a rail line used by Amtrak, Caltrain, and Union Pacific freight trains for daily services. Noise-sensitive receptors in the Housing Element Update area include residences and schools.



4.13.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project result in:					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Noise Conclusions

The Morgan Hill 2035 FEIR concluded that the construction and operation of future development proposed under the General Plan would generate noise that may exceed the ambient noise levels. Construction noise impacts would be reduced due to the Morgan Hill Municipal Code time restrictions on construction activities and General Plan policies, such as Policy SSI-8.2, that requires a project-specific noise study be prepared to mitigate construction noise impacts. The Morgan Hill 2035 EIR found that impacts related to operational noise would result in a significant and unavoidable impact because the buildout of the General Plan would generate new vehicular traffic noise on certain road segments that could not be reduced with mitigation. Impacts related to groundbourne vibration would be less than significant since future developments would need to comply with the Morgan Hill Municipal Code, which contains restrictions on the instruments that generate vibrations, and the General Plan policies that reduce vibration impacts during construction. There would be no airport noise impacts since the Morgan Hill city limits and SOI are not within the South County Airport noise contours.

Impact NOI-1:	The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. [Same Impact as Approved Project (Significant and Unavoidable)]
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Construction Noise

Construction of future developments proposed under the General Plan (including the Housing Element project locations) would result in temporary or periodic increases in ambient noise levels. The Morgan Hill 2035 FEIR concluded impacts would be less than significant because future developments would be subject to Morgan Hill Municipal Code Section 8.28.040(D) and Policies SSI-8.2, SSI-8.6, and SSI-9.5. The City's Municipal Code restricts construction activities within the allowable hours of 7:00 a.m. and 8:00 p.m., Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Further, General Plan Policy SSI-8.2 requires project-specific noise studies to be prepared for future developments. Adherence to the Morgan Hill Municipal Code and the General Plan policies specific to noise would ensure that new development facilitated by the Housing Element Update would have a less than significant temporary construction noise impact. For these reasons, the Housing Element Update would not result in new or substantially more severe impacts in relation to ambient noise levels from temporary activities. **[Same Impact as Approved Project (Less than Significant)]**

Operational Noise

The Morgan Hill 2035 FEIR concluded that the buildout of the General Plan (including the Housing Element Update) would result in substantial permanent increases to the ambient noise level due to increased vehicular traffic on local roadways. While there are General Plan policies to reduce traffic noise (Policies SSI-9.1 and TR-2.2) and to construct sound walls to reduce traffic noise (Policies SSI-9.2 and SSI-9.3), the construction of sound walls or berms would not be practical or appropriate for all locations. As a result, the Morgan Hill 2035 FEIR concluded that there was no feasible mitigation to reduce impacts to a less than significant level; therefore, impacts were determined to be significant and unavoidable.

Future development proposed under the Housing Element Update would contribute to the increased traffic noise in the Morgan Hill SOI and the buildout of the Housing Element Update would combine with other growth from General Plan buildout to cause a permanent increase in ambient noise levels. Therefore, the Housing Element Update would contribute to the significant and unavoidable impacts previously disclosed in the Morgan Hill 2035 FEIR. However, the Housing Element Update does not propose any change in the location or density of housing currently allowed under the General Plan, and so the future trips from new residences would be in keeping with what was evaluated and disclosed in the Morgan Hill 2035 FEIR. These impacts are not new or substantially more severe than the impacts disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Significant and Unavoidable)]**

Impact NOI-2:	The project would not result in generation of excessive groundborne vibration or groundborne noise levels. [Same Impact as Approved Project (Less than Significant)]
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Short-Term Construction-Related Vibration Impacts

Construction activities from the buildup of the General Plan (including the Housing Element Update) have the potential to cause significant vibration impacts. Policy SSI-8.2 and the Morgan Hill Noise Ordinance and Zoning Code would reduce vibration impacts from construction. Adherence to these policies, would ensure that construction of future housing under the Housing Element Update would not result in sustained levels of vibration by requiring an impact evaluation be prepared for proposed future development projects and limiting construction only to the allowable hours. Therefore, the Housing Element Update would not result in new or substantially more severe impacts in relation to vibration impacts. **[Same Impact as Approved Project (Less than Significant)]**

Long-Term Vibration Impacts

The Morgan Hill 2035 FEIR concluded that long-term vibration impacts would be less than significant because future development under the General Plan would undergo project-level review, which would consider land use compatibility. Additionally, Policy SSI-8.2 requires that a land use compatibility evaluation be prepared to identify potentially adverse vibration impacts. The Housing Element Update would facilitate the construction of housing, which are not land uses that generate significant stationary sources of vibrations. There would be no operational vibration impacts from the buildup of the Housing Element Update. **[Less Impact as Approved Project (Less than Significant)]**

Impact NOI-3:	The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. [Same Impact as Approved Project (No Impact)]
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The Morgan Hill SOI is not within the vicinity of a private airstrip or an airport land use plan. The nearest public airport is the South County Airport of Santa Clara County in San Martin, located approximately 1.5 miles southeast of SOI. The Housing Element project locations are not within the noise contours of this airport; therefore, there would be no from airport-related noise impacts to future residents under the Housing Element. Implementation of the Housing Element Update would not result in new or substantially more severe impacts to mineral resources than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (No Impact)]**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.⁸¹ The City of Morgan Hill Housing Element and related land use policies were last updated in April 2015.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.⁸²

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a technical overview of the of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to population and housing. The following policies are applicable to the Housing Element Update.

⁸¹ California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed June 20, 2022. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

⁸² Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

Morgan Hill 2035 General Plan Policies: Population and Housing

Policy	Description
CNF-2.2	A Balanced Community. Plan for the needs of all socioeconomic segments of the community, encouraging a balance and match in jobs and housing within the City.
CNF-3.1	RDCS Purpose. Maintain a Residential Development Control System (RDCS) to manage the amount, rate, type, and location of residential development in Morgan Hill.
CNF-3.2	Relationship to General Plan. Require the RDCS to implement the goals, and policies of the General Plan as they relate to residential development in Morgan Hill through 2035.
CNF-3.4	Population Limit. Plan for a January 1, 2035 population of 58,200 residents.
CNF-3.5	Rate of Growth. Maintain steady and predictable annual growth consistent with the population limit.
CNF-3.6	Adequate Services and Infrastructure. Allow residential growth only if it is within the ability for the City to provide adequate public services and infrastructure for new development and the community at large.
CNF-3.7	Jobs/Housing Balance. Plan for residential growth that supports a healthy balance between residents and jobs located within Morgan Hill.
CNF-4.2	<p>Urban Growth Boundary. Maintain a long-term Urban Growth Boundary that:</p> <ul style="list-style-type: none"> a) provides greater stability of future land use patterns than is currently provided by the existing "short term" urban service area (USA) boundaries; b) indicates the preferred extent and direction of the City's future urban expansion and capital improvements planning; c) encourages compact and concentric urban growth and development; d) promotes fiscal responsibility, cost-effective service delivery, and the City's ability to plan for and adequately maintain urban services over time; e) provides for an adequate land supply necessary for sustainable economic growth; f) compensates for the impacts of the City's historical patterns of urban growth; g) achieves greater compatibility of land use planning and decision-making for lands of mutual interest to the City and County; and h) provide additional certainty to rural landowners needed for purposes of planning investments and maintaining viable agricultural operations.
CNF-4.3	Prerequisites for Urban Development. Consider land adjacent to the City as available for urban development only when it is included within the Urban Service Area and Urban Growth Boundary, can be developed in a manner that will be cost effective to the City, and will be served by adequate public services and facilities.
CNF-4.8	Land Supply. Include enough land within the Urban Service Area to provide for a rate, amount, and type of development consistent with the General Plan; review and modify the Urban Service Area boundaries as needed.
CNF-4.9	Orderly Growth. Urban growth should occur in an orderly and contiguous pattern, within the designated Urban Service Area, encouraging infill of vacant urban land. (South County Joint Area Plan 1.09 & 1.10)
CNF-4.10	Urban Service Area Expansions. Base expansion of urban service areas and annexations on the General Plan, consistent with the City's schedules for development and extension of services. (South County Joint Area Plan 1.11 & 1.12)

CNF-4.11	Urban Service Area Expansions Within UGB. Allow Urban Service Area expansions only within the long-term UGB and for lands with urban designations; the timing and extent of Urban Service Area expansion shall remain consistent with established Urban Service Area expansion policies and ordinances.
HE-1hh	Relocation Assistance. Require relocation assistance when privately funded redevelopment displaces extremely low, very low, low, or moderate income residents.

4.14.1.2 *Existing Conditions*

As discussed in Section 3.2 Existing Conditions, the population of Morgan Hill was estimated to be 46,454 in 2020.⁸³

There are 21,775 employed residents, and 18,428 jobs in Morgan Hill - the ratio of jobs to resident workers is 0.85; Morgan Hill is a net exporter of workers.⁸⁴

4.14.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Population and Housing Conclusions

The Morgan Hill 2035 FEIR concluded that while the level of growth projected under the General Plan would exceed the ABAG regional projections, the General Plan policies would provide a planning framework to control the growth, which would reduce impacts related to unplanned population growth to less than significant. In addition, the development proposed under the General Plan would not directly displace existing people or housing and any parcel that requires the redevelopment of residential buildings would be replaced with new higher-density residential development. Impacts would be less than significant.

⁸³ City of Morgan Hill. City of Morgan Hill Housing Element 2023-2031. Appendix H1. Housing Needs Assessment.

⁸⁴ Ibid.

Impact POP-1:	The project would not 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). [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR projected that buildout of the General Plan (including the Housing Element Update) would result in a total population of 68,057 residents with the net growth being 21,130 residents. It was concluded that while the anticipated population growth would exceed ABAG projections, impacts would be less than significant because the growth calculated did not account for residential development control system utilized by the City of Morgan Hill and policies from the General Plan would provide the framework for controlled growth. As previously discussed, the RDCS has been pre-empted by the Housing Crisis Act. Therefore, population growth within the City of Morgan Hill would need to be evaluated in light of the availability and capacity of public infrastructure, as buildout gets closer to the population cap of 58,200 that was evaluated by the Morgan Hill 2035 FEIR.

The Housing Element Update would generate a net increase of 6,481⁸⁵ residents, which is within the net residential growth analyzed in the Morgan Hill 2035 FEIR. Therefore, the Housing Element Update would not induce population growth that has not already been accounted for in the Morgan Hill 2035 FEIR. The net growth facilitated by the Housing Element Update would be subject to the same General Plan goals and policies (Goal CNF-2, Policy CNF-2.1, Policy CNF-2.2, Policy CNF-4.2, Policy CNF-4.3, Policy CNF-4.8, Policy CNF-4.9, Policy CNF-4.10, and Policy CNF-4.11) as described in the Morgan Hill 2035 FEIR. These policies would create a framework to manage population growth in Morgan Hill to ensure new growth does not exceed the City's current infrastructure capacity. For this reason, the Housing Element Update would not result in new or substantially more severe impacts to population growth. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. [Same Impact as Approved Project (Less than Significant Impact)]
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As described in the Morgan Hill 2035 FEIR, the General Plan encourages the development of new residences (single-family and multi-family residences), retail space, commercial space, industrial space, service space, and public facilities space. There is potential for the displacement of existing residents if existing sites are redeveloped to accommodate denser infill housing. However, new residential development would be required to replace the existing housing units, and this is enforced by General Plan Policy HE-1hh. Therefore, buildout of the General Plan, which includes the Housing Element Update, would not result in the permanent displacement of existing people or housing nor would it necessitate the construction of replacement housing elsewhere. The Housing Element Update would not result in new or substantially more severe impacts to the existing people or housing. **[Same Impact as Approved Project (Less than Significant Impact)]**

⁸⁵ Assumes 2.93 persons per household. Source: California Department of Finance. Population and Housing Estimates for Cities, Counties, and the State, 2021-2022 with 2020 Census Benchmark. Site accessed July 11, 2022. <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to public services. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Public Services

Policy	Description
CNF-6.1	Services to Serve Growth. Manage and schedule urban growth consistent with the ability to provide a full array of urban services and facilities, such as sewer capacity, water, transportation, schools, public safety and other urban services. (South County Joint Area Plan 1.08)
CNF-6.2	Service Standards. Ensure that facility/service standards can be met for new development by the time of occupancy.
CNF-6.3	New Public Facilities. Ensure that plans for public facilities (e.g., parks, City offices, fire stations) reflect the anticipated location, amount, and type of new development.
CNF-6.4	Public Facilities Upgrades. Evaluate the need for improvements to existing public facilities based on such factors as the location and extent of new residential, commercial and industrial development, residential densities, and neighborhood development patterns.
CNF-6.6	Urban Level of Public Services. Fully utilize existing strategies to achieve an urban level of public services throughout the City, including by a) requiring that the timing and location of future urban development be based upon the availability of public services and facilities; b) requiring new development to pay all the incremental public service costs which it generates; and c) requiring developers to dedicate land and/or pay to offset the costs relating to the provision and expansion of public services and facilities. (South County Joint Area Plan 5.01)
CNF-6.7	Impacts on City Infrastructure. Require all development that may result in a substantial impact on City infrastructure and/or services to be analyzed to determine the extent of that fiscal burden.
SSI-3.1	Development in Fire Hazard Areas. Minimize development in fire hazard areas and plan and construct permitted development so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire. (South County Joint Area Plan 15.04)
SSI-3.2	Wildfire Risks. Avoid actions which increase fire risk, such as increasing public access roads in fire hazard areas, because of the great environmental damage and economic loss associated with a large wildfire. (South County Joint Area Plan 15.04)
SSI-3.3	Public Facilities Location. Locate, when feasible, new essential public facilities outside of high fire risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identify construction methods or other methods to minimize damage if these facilities are located in a state responsibility area or very high fire hazard severity zone.
SSI-3.4	Adequate Infrastructure. Design adequate infrastructure if a new development is located in a state responsibility area (SRA) or in a very high fire hazard severity zone (VHFHSZ) or high fire hazard severity zone (HFHSZ) as indicated on the City of Morgan Hill Wildland Urban Interface map (adopted March 18, 2009), including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
SSI-3.5	Fire Risks. Work cooperatively with CAL FIRE and other public agencies with responsibility for fire protection to reduce fire risks in Morgan Hill.
SSI-3.6	Fire Hazard Severity Zones. Continue to support special High Fire Hazard Severity Zone requirements.

SSI-11.1	Staffing. Provide police and fire staffing and facilities as necessary to provide adequate public safety protection.
SSI-11.2	Prevention through Design. Promote police and fire security considerations in all structures by ensuring that crime and fire prevention concepts are considered in development and design.
SSI-11.3	Medical Services. Encourage provision of a full range of medical services in the city, including an acute care hospital. .
HC-1.1	Neighborhood Schools. Coordinate community development and school development to promote neighborhood schools, which educate neighborhood children and serve as a community resource facility.
HC-1.2	Coordinate School Development. Work with the Morgan Hill Unified School District to coordinate planning for school facilities in conjunction with new development, and to identify appropriate locations for future school facilities.
HC-1.3	Quality Education. Cooperate with the City of San Jose, Santa Clara County, and the Morgan Hill Unified School District to ensure a high quality education experience by providing adequate and safe school facilities, preventing overcrowding, and providing school locations convenient to the population served.
HC-1.4	Strategic Plan. Encourage the Morgan Hill Unified School District, Gavilan College, and private schools to develop a strategic plan for and construct schools to coincide with the planned future growth of the City.
HC-1.5	Site Selection. Work with the Morgan Hill Unified School District in selecting sites for new schools to optimize educational and community development goals. (South County Joint Area Plan 4.08)
HC-1.6	Efficient Siting. Site new residential development in areas served by existing schools to allow school facilities to be used most efficiently and to minimize busing needs. (South County Joint Area Plan 4.05)
HC-1.7	Neighborhood Activities. Encourage the Morgan Hill Unified School District to design, site, and upgrade elementary schools with flexible facilities that are accessible after school hours for community use to serve as the focal point of each neighborhood's diverse and changing social, cultural, vocational, recreational, and educational activities.
HC-1.8	Park Coordination. Work with the Morgan Hill Unified School District to locate parks and schools together to optimize their use as community facilities. (South County Joint Area Plan 4.10)
HC-1.12	School Availability. The City Council may reduce the number of available residential allotments for an individual RDCS competition year upon making certain findings, including that public infrastructure and services (including schools) are or will be inadequate to accommodate new development.
HC-1.A	Funding. Support the development of additional and innovative financing techniques for school improvements and construction. (South County Joint Area Plan 4.13)

4.15.1.2 Existing Conditions

Fire Protection

The City of Morgan Hill contracts with the California Department of Forestry and Fire Protection (CalFire) for fire and emergency medical services. The City is served by three stations at the following locations: (1) El Toro Fire Station, located at 18300 Old Monterey Road, (2) Dunne Hill Fire Station, located at 2100 East Dunne Avenue, and (3) Headquarters at 15670 Monterey Street.⁸⁶ The City has identified the new need for a new fire station that is expected to be operational by 2024. The new fire station would be located at 17285 Butterfield Boulevard.

Police Protection

Police service is provided to the Housing Element Update project locations by the City of Morgan Hill Police Department (MHPD). The MHPD facility is located at 16200 Vineyard Boulevard. The department employs 42 sworn officers.⁸⁷ The Police Department's dispatched approximately 90 percent of Priority One calls within 90 seconds of call receipt and dispatched approximately 90 percent of Priority Two calls within five minutes of call receipt.⁸⁸ Priority One calls are reports of a crime in progress or where an injury has occurred, and Priority Two calls are reports of felonies and other major calls.

Schools

The Housing Element Update project locations are located within the Morgan Hill Unified School District (MHUSD). The MHUSD has six elementary schools, two elementary/middle schools (K-8), one Dual Immersion magnet program (K-8), two middle schools (6-8), two comprehensive high schools (9-12), one continuation high school and a community adult school.⁸⁹

Parks

The City owns 70 acres of developed park land (including the Civic Center, assessment district parks and city owned trails) and 59 acres of recreation facilities. Included within this inventory, the City maintains two community parks, five neighborhood parks, two neighborhood/school parks, and 15 mini-parks, in addition to its public trail system and open space. In addition to publicly owned park land, there is also a significant amount of recreational land and open space in the City that is privately owned and maintained.

The City also owns and operates special use facilities for recreational purposes. These facilities include the Morgan Hill Aquatics Center, Community and Cultural Center, the Centennial Recreation Center, the 38-acre Outdoor Sports Center, and Skateboard/BMX park. Many sports leagues and

⁸⁶ City of Morgan Hill. “Fire”. Accessed May 31, 2022. Available at: <https://www.morgan-hill.ca.gov/445/Fire>

⁸⁷ City of Morgan Hill. Morgan Hill wishes Police Chief David Swing well in his new role. March 11, 2020.

Accessed May 31, 2022. Available at: <http://www.morgan-hill.ca.gov/CivicAlerts.aspx?AID=1553&ARC=3154>.

⁸⁸ City of Morgan Hill. City of Morgan Hill Fiscal Years 2020-2021 and 2021-2022 Operating and CIP Budget.

April 17, 2020. Accessed May 31, 2022. Available at: <https://user-ddhj25y.cld.bz/City-of-Morgan-Hill-Fiscal-Years-2020-2022-Recommended-Operating-and-CIP-Budgets/14/>.

⁸⁹ Morgan Hill Unified School District (MHUSD). “About”. Accessed May 31, 2022. Available at: <https://www.mhusd.org/about>

teams use Morgan Hill School District facilities after school hours and on weekends. These facilities include 12 baseball/softball fields, two football fields, two tracks, and four swimming pools.

The General Plan includes policies that support the City's park land and recreational goal to provide useful, accessible, and high-quality parks, recreation, and trail facilities. To achieve this goal, the City has adopted General Plan Policies and a park land dedication/park land in-lieu fee ordinance (Municipal Code Chapter 17.28) that requires park land dedication or in-lieu fees for residential developments. In accordance with General Plan Policies HC-3.3 and HC-3.29, park land dedication or in-lieu fees are required by new developments to meet the recreation and open space needs of residents in Morgan Hill.

Libraries

The Morgan Hill Library is a member of the Santa Clara County Library District. The Santa Clara County Library District (SCCLD) governs and administers seven community libraries, one branch library, two bookmobiles, the Home Service Library, and the 24-7 online library for all library users. The SCCLD serves all unincorporated communities of Santa Clara County, as well as nine Santa Clara County cities, including Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, and Saratoga. As one of the SCCLD's member cities, Morgan Hill has a community library located on 680 West Main Avenue.

4.15.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other Public Facilities?					

Morgan Hill Final EIR – Public Services Conclusions

The Morgan Hill 2035 FEIR concluded that the buildup of the General Plan would generally increase the need for the use of fire protection services, police protection services, schools, parks, and public facilities, such as libraries. Compliance with General Plan policies related to all public services and the payment of impact fees for fire protection, police protection, schools, and parks

would ensure that there would be adequate public services for all future growth. Impacts would be less than significant.

Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. [Same Impact as Approved Project (Less than Significant Impact)]
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The General Plan buildout, which includes the Housing Element Update, would result in new service population that would increase the demand for fire protection services. Much of the future development allowed under the proposed General Plan would occur on sites that are within or adjacent to already urbanized and/or developed areas and are already served by existing fire stations. Some development may be located in the East of 101 Area Plan overlay area, which is an undeveloped area that would require a new fire station to meet the future needs of the City. However, the CalFire has created an allocation funds to finance the process of constructing a new fire station. The Morgan Hill 2035 FEIR concluded that the General Plan goals, policies, and actions (Goal CNF-6, Policy CNF-6.1, Policy CNG-6.2, Policy CNF-6.3, Policy CNF-6.4, Policy CNF-6.6, Policy CNF-6.7, Goal SSI-3, Policy SSI-3.1, Policy SSI-3.2, Policy SSI-3.3, Policy SSI-3.4, Policy SSI-3.5, Policy SSI-3.6, Goal SSI-11, Policy SSI-11.1, Policy SSI-11.2, and Policy SSI-11.3) along with the impact fees would ensure that adequate fire protection services would be provided.

The residential development facilitated by the Housing Element Update would be served by the existing Morgan Hill fire protection services except for Location 11, which is within the East of 101 Area Plan Overlay. These residential developments would be subject to the General Plan policies and City's fire prevention regulation and procedures. The City reviews plans and conducts construction inspections to ensure new development complies with existing building and fire code requirements. In addition, new development is required to pay an impact fee for new residential construction. A new fire station is being planned for the East of 101 Area; therefore, Location 11 would receive fire protection services from CalFire. For these reasons, the Housing Element Update would not result in new or substantially more severe impacts to fire protection services. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact PS-2:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. [Same Impact as Approved Project (Less than Significant Impact)]
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A significant impact would result if increased demand in the City limits and SOI would require the construction of new police facilities or the expansion of existing facilities in order for the MHPD and Sheriff's Office to adequately serve Morgan Hill, the construction or operation of which would cause significant environmental impacts. The Morgan Hill 2035 FEIR concluded that existing station

facilities would need to be expanded or renovated to meet long-term future needs. However, this would not require constructing of a new building, but rather in the form of expanding the MHPD space to take over space currently occupied by a tenant, which would not entail substantial environmental impacts. In addition, the Morgan Hill 2035 FEIR concluded that new vehicles and safety equipment would be required. Payment of development impact fees from new development and General Plan policies would reduce potential impacts to less than significant. Applicable policies include Policy SSI-11.1 and Policy SSI-11.2, which call on the City to provide adequate police and fire staffing facilities for public safety and encourages all new structures be designed with crime and fire prevention design. Residential development facilitated by the Housing Element Update would be subject to these General Plan policies and impact fees. For these reasons, and given the Housing Element Update would not alter the location or density of planned housing under the General Plan, the Housing Element Update would not result in new or substantially more severe impacts to police protection services. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impacts on school facilities would be potentially significant if the buildout of the General Plan (including future residences planned under the Housing Element Update) would require the construction of new facilities or expansion of existing schools. The Morgan Hill 2035 FEIR concluded that with the new development proposed under the General Plan, the MHUSD elementary schools would be 1,711 students over capacity, middle schools would be 109 students under capacity, high schools would be 509 students over capacity, and the district as a whole would be 2,110 students over capacity in the year 2035. The school district does not currently have plans to expand existing facilities and does not own any vacant land on which it could build. The Morgan Hill 2035 FEIR concluded that impacts to school facilities would be less than significant due to the payment of impact fees pursuant with California Government Code Section 65995. Additionally, policies from the General Plan would help to further reduce potential impacts (Policy HC-1.1, Policy HC-1.2, Policy HC-1.3, Policy HC-1.4, Policy HC-1.5, Policy HC-1.6, Policy HC-1.7, Policy HC-1.8, Policy HC-1.12, and Action HC-1.2) by requiring the City to continuously coordinate with the Morgan Hill Unified School District to ensure that new residential development can be served by existing schools and to plan for new school facilities by taking into account site selection and funding. Future development proposed under the Housing Element Update would be required to pay school impact fees to mitigate impacts, which is considered full and complete school facilities mitigation under the California Government Code (Section 65996[b]). Therefore, the Housing Element Update would not result in new or more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact PS-4:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. [Same Impact as Approved Project (Less than Significant Impact)]
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The 2035 General Plan proposed to eliminate the City's existing park standard of 5 acres of parkland for every 1,000 Morgan Hill resident and replace it with a new one to be developed as part of the Parks, Recreation, Trails, and Bikeways Master Plan Update. However, since the new park standard had not been finalized⁹⁰, the Morgan Hill 2035 FEIR relied on the existing park standard. The FEIR concluded that the City would need an additional 132 acres of parkland by 2035 to accommodate a population of 68,057 residents. At the time the EIR was prepared, the City had plans to expand their park inventory by 39.5 acres. Since certification of the EIR, the City's parkland inventory has been expanded to approximately 175 acres or 3.97 acres of parkland for every 1,000 Morgan Hill resident, which would not meet the park standard. Consistent with the Morgan Hill 2035 FEIR findings, additional park acreage would be needed to meet park demand from new residents from development allowed under the General Plan. While implementation of the General Plan would require the construction or expansion of park facilities, the General Plan did not identify any specific locations for the construction of any parks or recreational facilities. With payment of park impact fees pursuant to the City's parkland dedication/park land in-lieu fee ordinance under Municipal Code Chapter 17.28 and compliance with General Plan policies (Policy HC-3.1, Policy HC-3.2, Policy HC-3.3, Policy HC-3.4, Policy HC-3.8, Policy HC-3.9, Policy HC-3.10, Policy HC-3.11, Policy HC-3.12, Policy HC-3.13, Policy HC-3.14, Policy HC-3.15, Policy HC-3.16, Policy HC-3.17, Policy HC-3.22, Policy HC-3.23, Policy HC-3.24, Policy HC-3.25, Policy HC-3.28, and Policy HC-3.29), impacts would be reduced to less than significant.

The 2,212 housing units that would be constructed as part of the Housing Element Update would comply with the parkland dedication/park land in-lieu fee ordinance, which would offset to the City's park facilities. Therefore, the Housing Element Update would not result in new or more severe significant impacts to park facilities. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact PS-5:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. [Same Impact as Approved Project (Less than Significant Impact)]
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SCCLD does not have a service standard for new development. Accordingly, the Morgan Hill 2035 FEIR relied on comparative data from the California State Library. Based on state data, the average library size for a City of Morgan Hill's size is approximately 23,371 square feet. The City's library is

⁹⁰ The Bikeways, Trails, Parks and Recreation Master Plan was adopted by the City of Morgan Hill on July 20, 2017. The parkland standard in the Master Plan is five acres per 1,000 residents, which is the same standard used in the Morgan Hill 2035 FEIR.

28,000 square feet and exceeds the state average. According to the Morgan Hill 2035 FEIR, the City has plans to expand the library by 10,600 square feet, which would bring the library to 41,525 square feet. Based on the projected 2035 population of 68,057, the City would be slightly below the average. However, the size of the libraries and the size allocated for various functions, varies widely based on individual community need. The City's library is well funded for collections, and has a large collection. The Morgan Hill 2035 FEIR concluded that impacts would be less than significant because the net growth would occur incrementally up until the year 2035 and future development facilitated by the General Plan would undergo project-specific environment review pursuant to CEQA, which would identify mitigation measures to reduce potentially significant impacts. Therefore, the residential development under the Housing Element would not result in new or more severe impacts relating to new or physically altered library facilities. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

4.16.1.2 *Existing Conditions*

Refer to Section 4.15 Public Services, for a description of the existing parks and recreational facilities in Morgan Hill.

4.16.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Recreation Conclusions

The Morgan Hill 2035 FEIR concluded that while the buildout of the General Plan does not include the construction of new parks and recreational facilities, new residential development would be required to pay park impact fees to generate revenue to fund future new and expanded park facilities. The General Plan policies related to recreational facilities would also support the need for additional recreational facilities. Impacts related to recreational facilities would be less than significant.

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **[Same Impact as Approved Project (Less than Significant Impact)]**

The buildout of the General Plan would increase the use and demand for existing neighborhood and regional parks and recreational facilities. The Morgan Hill 2035 FEIR concluded that additional park acreage would be needed to meet park demand for new residents from development allowed under the General Plan, as discussed under Impact PS-4. Future development would be required to pay park impact fees to generate revenue to fund future park facilities and meet the General Plan policies described under Impact PS-4. The Morgan Hill 2035 FEIR concluded that impacts would be less than significant due to the General Plan policies and park impact fees requirement. The future residential development associated with the Housing Element would be required to pay the impact fees and would be subject to the above policies. Therefore, the Housing Element would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact REC-2: The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **[Same Impact as Approved Project (Less than Significant Impact)]**

As described in Impact PS-4, the buildout of the General Plan would increase the use of existing recreational facilities and the City's parkland standard of five acres per 1,000 residents would not be met unless additional parks are built. The Morgan Hill 2035 FEIR concluded that future recreational facilities and improvements would undergo individual project-level environmental review in accordance with CEQA, which would disclose and mitigate impacts to the greatest extent possible. Therefore, impacts on the environment due to the construction or expansion of recreational facilities would be less than significant. The Housing Element Update would not require any adjustments to the location or density of planned residential uses from the current General Plan and would not result in new or substantially more severe impacts than disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.17 TRANSPORTATION

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2050 in October 2021, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

VTA oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts related to transportation. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Transportation

Policy	Description
TR-3.2	<p>Safe and Complete Improvements. Avoid creating incomplete public improvements that create public safety hazards.</p>
TR-3.4	<p>Level of Service Standards. As the Level of Service (LOS) policy and design criteria for roadway improvements, use a Tiered LOS Standard as follows:</p> <ul style="list-style-type: none"> • LOS F in the Downtown at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Streets. This LOS standard in the Downtown recognizes the unique nature of and goals for Downtown Morgan Hill as the transit hub of the City and as a center for shopping, business, entertainment, civic and cultural events, and higher-density, mixed-use living opportunities. This standard does not preclude the City, developers, and property owners from voluntarily implementing improvements and employing operational strategies to improve level of service, especially at the Main/Monterey intersection, if and when land uses redevelop. • LOS D for intersections and segments elsewhere; except: <ul style="list-style-type: none"> ◦ Allow LOS E for identified freeway ramps/zones, road segments and intersections that (1) provide a transition to and are located on the periphery of downtown; (2) are freeway zone intersections; and/or (3) where achieving LOS D could result in interim intersection improvements which would be “over-built” once the City’s circulation network has been completed, and/or would involve unacceptable impacts on existing buildings or existing or planned transportation facilities, including roads, sidewalks, bicycle and transit facilities; and/or would involve extraordinary costs to acquire land and existing buildings, and build the improvement in relation to benefits achieved; and/or the facility would be widened beyond requirements to serve local traffic, in that the facility accommodates a significant component of peak-hour sub-regional and regional through-traffic. • In order to reduce the incentive for regional travel to be drawn off the freeway and onto local neighborhood streets, protect neighborhoods, avoid overbuilding intersections, and to create an incentive for using alternate modes of travel, LOS E during peak hours of travel is acceptable for the following identified freeway ramps, road segments, and intersections: <ul style="list-style-type: none"> ◦ Main Avenue and Del Monte Avenue ◦ Main Avenue and Depot Street ◦ Dunne Avenue and Del Monte Avenue ◦ Dunne Avenue and Monterey Avenue ◦ Dunne Avenue and Church Street; also, until closed: Dunne Avenue and Depot Street ◦ Cochrane Road and Monterey Road ◦ Tennant Avenue and Monterey Road ◦ Tennant Avenue and Butterfield Boulevard ◦ Cochrane Road Freeway Zone: from ◦ Madrone Parkway/Cochrane Plaza to ◦ Cochrane/DePaul Drive ◦ Dunne Avenue Freeway Zone: from Walnut ◦ Grove/East Dunne to Condit/East Dunne ◦ Tennant Avenue Freeway Zone: from ◦ Butterfield/Tennant to Condit/Tennant ◦ Freeway Ramps

Morgan Hill 2035 General Plan Policies: Transportation

Policy	Description
	Projects shall pay the City's standard traffic impact fees imposed on new developments in accordance with the adopted impact fee schedule.
TR-9.10	Sidewalk Connectivity. Improve sidewalk connectivity by installing new sidewalks where they do not exist, consistent with the Trails and Natural Resources Master Plan.

4.17.1.2 *Existing Conditions*

Roadway Network

Regional Access

Highway 101 (US 101) is a north-south freeway extending northward to San Francisco and southward through Gilroy. US 101 an eight-lane freeway (three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction) north of Cochrane Road. South of Cochrane Road, it is a six-lane freeway with no HOV lanes.

Local Access

Major arterials and local roads provide access within the limits of Morgan Hill. Roadways that would be relevant to the Housing Element Update are described below. The Morgan Hill 2035 FEIR includes additional roadways, which are described in greater detail below. Note that the roadway network is generally the same as described in the Morgan Hill 2035 FEIR.⁹¹

- Cochrane Road is an east-west divided roadway that runs from Monterey Road to Malaguerra Avenue, east of US 101. Currently, Cochrane Road is a four-lane road between Monterey Road and Sutter Boulevard. Between Sutter Boulevard and US 101, Cochrane Road widens to three lanes eastbound and two lanes westbound, then narrows back to four lanes east of US 101, and to two lanes east of Mission View Drive.
- Monterey Road is a north-south divided major arterial that runs parallel to US 101. The roadway provides connections from Gilroy, San Martin, Morgan Hill, and San José. Monterey Road is a four-lane roadway until it reaches San José where it becomes a six-lane roadway.
- Butterfield Boulevard is a north-south route in Morgan Hill with four-lanes. The roadway includes a Class I bikeway and pedestrian path from Cochrane Road to the Watsonville Road/Monterey Road intersection.
- Dunne Avenue extends from the east part of Morgan Hill to the west side of the side and has sidewalks located along both sides of the street. Bicycle lanes are located along both sides of Dunne Avenue between Peak Avenue and Gallop Drive (east of US 101).

⁹¹ Notable roadway improvements since certification of the Morgan Hill 2035 FEIR include: widening of a portion of Cochrane Road, Depot Road Realignment (in progress), Hale Avenue Realignment (in progress), and the extension of Sutter Road from Butterfield to Digital Drive (in progress). Other improvements have occurred along a segment of Mission View and Murphy Road.

- Tennant Avenue is an east-west roadway that provides connectivity from Foothill Avenue to Monterey Road. From Foothill Avenue to US 101, the roadway is a two-lane road then it expanded to a four-lane roadway from US 101 to Monterey Road.

Existing Bicycle, Pedestrian and Transit Facilities

Bicycle Facilities

Bicycle facilities in the Housing Element Update area include Class I bikeways, Class II bike lanes, and Class III bike routes. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. Class II bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Class III bike routes are existing streets (signed shared roadways) that accommodate bicycles but are not separate from the existing travel lanes. Bicycle lanes are currently provided throughout Morgan Hill. Refer to Figure 4.14-3 in the Morgan Hill 2035 Draft EIR for a map of existing bicycle facilities in Morgan Hill.

Pedestrian Facilities

Pedestrian facilities in the Housing Element Update area consist primarily of sidewalks, pedestrian push buttons and signal heads at signalized intersections. The major intersections in the city have marked crosswalks and pedestrian crossing signals.

Transit Facilities

Existing transit service to the Housing Element Update area is provided by VTA and Caltrain. VTA provides local bus services with the following bus routes serving Morgan Hill: Frequent Route 68, Rapid Bus 568, Local Bus Route 84-87, and Express Route 121.⁹² The Morgan Hill Caltrain station is located along Depot Street and provides connection to stations from San Francisco to Gilroy. Caltrain provides commuter rail service between San Francisco and Gilroy. At the Morgan Hill station, Caltrain only provides service in the northbound direction during the AM commute period with 30-minute headways and in the southbound direction only during the PM commute period with approximately 90-minute headways.

⁹² Valley Transit Authority. Maps. South County Map. Accessed on August 30, 2022.
https://www.vta.org/sites/default/files/2022-06/VTA_SouthCounty_061322.pdf

4.17.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Transportation Conclusions

The Morgan Hill 2035 FEIR evaluated traffic based on level of service, or vehicular delay, at intersections and along freeway and roadway segments, and found that the General Plan buildout would result in significant and unavoidable traffic impacts related to level of service (LOS) at freeway segments along US 101. The Morgan Hill 2035 FEIR concluded that LOS impacts at the Monterey Road and Central Avenue intersection and the Tennant Avenue and Murphy Avenue intersection would be reduced to less than significant with the implementation of Mitigation Measures TRAF-1A and TRAF-1B, which would require signals be installed at each intersection. However, subsequent to the certification of the 2035 EIR and adoption of the 2035 General Plan, SB 743 was enacted and related Guidelines implementing SB 743 (see Guidelines Section 15604.3) were adopted which require lead agencies to evaluate transportation impacts using vehicle miles traveled, and a project's effect on automobile delay is no longer considered an impact under CEQA.

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation Incorporated)]**

Roadway Network

As noted above, the Morgan Hill 2035 FEIR evaluated future buildout using LOS, and subsequent to the certification of the FEIR, CEQA was amended by SB743 to no longer rely on vehicle delay or congestion as the metric to evaluate transportation impacts. The Morgan Hill 2035 FEIR concluded that two study intersections (Monterey Road/Central Avenue and Tennant Avenue/Murphy Avenue) would exceed the LOS standards during peak hours. The FEIR identified two mitigation measures, Mitigation Measures TRAF-1A and TRAF-1B, that would reduce impacts to less than significant. These measures require the City to install a signal at the intersection of Monterey road and Central

Avenue and at the intersection of Tenant Avenue and Murphy Avenue. LOS conditions would be acceptable with implementation of Mitigation Measures TRAF-1A and TRAF-1B. In addition, segments of Highway 101 would continue to operate at LOS F and the addition of traffic from the General Plan buildout, including trips from future residences on the Housing Element project locations, would account for one percent of the freeway capacity in 2035. Implementation of Mitigation Measure TRAF-2 would require that Highway 101 be widened to five lanes to increase freeway capacity. However, this mitigation measure is dependent on funding from VTA and Caltrans, which is not guaranteed. Therefore, the congestion resulting from General Plan buildout, including vehicle delay resulting from trips produced by future Housing Element project locations, would exceed CMP standards. However, in accordance with CEQA Guidelines Section 15064.3(a), LOS can no longer be used as a metric to identify traffic impacts under CEQA. Instead, the relevant question is whether the project's effects on intersection LOS and/or roadway operations would necessitate the construction or funding of physical improvements that could have an adverse effect on the environment. The environmental effects of the potential future widening of Highway 101 to five lanes have not yet been fully identified by either the VTA or Caltrans.

Future development under the Housing Element Update would be evaluated for consistency with General Plan Policy TR-3.4 to determine whether the Housing Element Update's effects on intersection LOS and/or roadway operations would necessitate the construction or funding of physical improvements that could have an adverse effect on the environment. For this reason, and because no changes are proposed to the location or density of planned housing within the City, the Housing Element Update would not result in new or more severe impacts. **[Same Impact as Approved Project (Less than Significant Impact)]**

Bicycle Facilities

The Morgan Hill 2035 FEIR determined that the General Plan would support and not conflict with the Santa Clara Countywide Bicycle Plan and the City of Morgan Hill Bikeways Master Plan Update. General Plan policies (Policy TR-2.1, Policy TR-8.4, TRA-8.5, TRA-8.11, and Policy TRA-8.14) call for the coordination of regional bicycle planning, the integration of more multi-modal systems in Morgan Hill, and the implementation of the City's Bikeway Master Plan. The future residential developments on the Housing Element project locations would be designed to support multi-modal systems for all users pursuant with Policy TR-2.1. Therefore, the Housing Element Update would not result in new or more severe impacts. **[Same Impact as Approved Project (Less than Significant Impact)]**

Pedestrian Facilities

The Morgan Hill 2035 FEIR determined that impacts related to pedestrian facilities would be less than significant because the General Plan policies would support the City's efforts to expand the pedestrian network in Morgan Hill. General Plan Policy TR-9.1 requires that private developments provide adequate pedestrian access in all developments and Policy TR-9.4 requires coordination of pedestrian planning between the City and County. The residential developments under the Housing Element Update would comply with the design requirements under General Plan Policy TR-9.1. Therefore, the Housing Element Update would not result in new or more severe impacts. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). [Same Impact as Approved Project (Less than Significant Impact)]
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This CEQA checklist item was added to the Guidelines in 2018 and did not exist in 2016 when the Morgan Hill 2035 FEIR was certified. Nonetheless, the Morgan Hill 2035 FEIR included a comparative evaluation for the existing VMT conditions versus the 2035 buildout VMT conditions to determine the effects of the proposed General Plan on existing travel patterns within the City. The Morgan Hill 2035 FEIR concluded that VMT per service population would decrease under the 2035 buildout horizon when compared with existing conditions.

As shown in Table 4.14-8 of the Morgan Hill 2035 FEIR, the VMT per service population is expected to decrease with the construction of the General Plan buildout. The existing VMT per service population is 29.3 and with the General Plan Buildout, which includes the Housing Element Update, the VMT per service population would decrease to 26.7.⁹³ Future development proposed under the Housing Element Update would not change existing land uses or result in greater density than analyzed in the Morgan Hill 2035 FEIR. Therefore, the Housing Element Update would not result in new or more severe impacts related to VMT. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [Same Impact as Approved Project (Less than Significant Impact)]
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As described in the Morgan Hill 2035 FEIR, the buildout of the General Plan would increase both residential and non-residential development that could result in new or modifications to existing roadways. However, these roadways would be designed and reviewed in accordance with City design standards and incompatible uses would be discouraged. Further, future development would comply with General Plan policies (Policy TR-1.3, Policy TR-3.2, Policy TR-3.8, Policy TR-3.21, and Policy TR-3.16) that require the incorporation of safe transportation design features, monitoring of congestion and safety to identify potential improvements, and review of speed limits. Compliance with the City's standards and policies would reduce impacts related to hazardous roadway design to less than significant. Future development proposed as part of the Housing Element Update would be required to be designed in accordance with the City's standards and the above-mentioned General Plan policies. Therefore, the Housing Element Update would not result in new or more severe impacts than those analyzed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact TRN-4:	The project would not result in inadequate emergency access. [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR found that compliance with the General Plan policies and actions (Policy SSI-12.4, Policy SSI-12.5, Policy SSI-12.6, and Action SSI-12.A) and the City's Design Standards and Standard Details for Construction would ensure that future development under the

⁹³ City of Morgan Hill. Morgan Hill 2035 DEIR. Table 4.14-8. January 2016.

General Plan would not result in inadequate emergency access. Future development associated with the Housing Element Update would be designed in accordance with the City's standards and the above-mentioned General Plan policies. Therefore, the Housing Element Update would not result in new or more severe impacts related to emergency access. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
 - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
 - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

AB 52 applies to non-exempt projects that are subject to a Notice of Intent (NOI) to Adopt a Negative Declaration or Notice of Availability (NOA) of a Draft EIR. A project eligible for an Addendum to an adopted Negative Declaration or certified EIR is not subject to AB 52 given an Addendum is not subject to a NOI or NOA.

4.18.1.2 *Existing Conditions*

As discussed in Section 4.5 Cultural Resources, numerous prehistoric sites with shell midden components, including human burials have been identified in the City. This finding indicates there is potential for additional undiscovered archeological resources in the City. During preparation of the Morgan Hill 2035 EIR, the City contacted all tribes listed by the NAHC, which included members of the Muwekma Ohlone Indian Tribe, Ohlone Indian Tribe, Amah Mutsun Tribal Band, and the Indian Canyon Mutsun Band of Costanoan tribe. The Amah Mutsun Tribal Band requested consultation on August 13, 2022. The City met with representatives of the Amah Mutsun Tribal Band on September 13, 2022. No other tribes requested consultation.

4.18.3 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Tribal Cultural Resources Conclusions

As described under Impact CULT-2 in the Morgan Hill 2035 FEIR, the City contacted tribes listed under the NAHC pursuant to AB 52 with no tribes requesting consultation. Impacts related to tribal cultural resources would be less than significant because new developments under the General Plan would comply with the Morgan Hill Municipal Code Chapter 18.60, which requires project-specific review for archaeological resources. This municipal code section would also protect tribal cultural resources; therefore, impacts would be less than significant.

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact TCR-2: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **[Same Impact as Approved Project (Less than Significant Impact)]**

For the Morgan Hill 2035 FEIR, the City of Morgan Hill prepared a notification letter to the NAHC-recommended list of tribes pursuant to AB 52. Consultation letters were submitted to the Muwekma Ohlone Indian Tribe, Ohlone Indian Tribe, Amah Mutsun Tribal Band, and the Indian Canyon Mutsun Band of Costonoan tribe. Responses were not received from any of the listed tribe. As noted above, the Housing Element Update is not subject to AB 52 consultation requirements given the Housing Element Update is eligible for an Addendum to the Morgan Hill 2035 FEIR, which has already complied with AB 52. However, the Amah Mutsun Trbal Band requested consultation as discussed above. The City met with tribal representatives on September 13, 2022. The tribe expressed concerns about the discovery of humans remains but made no specific recommendations or requests.

As discussed in Section 4.5 *Cultural Resources*, since construction of developments implemented under the General Plan (including the Housing Element Update) involves ground disturbance, there is the possibility of encountering undisturbed subsurface archaeological resources, which includes tribal cultural resources, during construction of the project. The Morgan Hill 2035 FEIR concluded that compliance with the provisions of the Morgan Hill Municipal Code and individual project-level environmental review of each development pursuant to CEQA would result in less than significant impacts. Therefore, implementation of the Housing Element Update would not result in new or substantially more severe impacts to tribal cultural resources. **[Same Impact as Approved Project (Less than Significant Impact)]**

4.19 UTILITIES AND SERVICE SYSTEMS

The following discussion is based, in part, on a Water Supply Assessment (WSA) completed for the Housing Element Update by Akel Engineering Group dated April 2022. A copy of this report is included in Appendix A.

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Morgan Hill adopted its most recent UWMP in October 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 610

SB 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires preparation of a WSA containing detailed information regarding water availability to be provided to the decision-makers prior to approval of specified large development projects that also require a General Plan Amendment. This WSA must be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, WSAs must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA. Pursuant to the California Water Code (Section 10912[a]), projects that require a WSA include any of the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects identified in this list; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

Reducing indoor water use by 20 percent;

Reducing wastewater by 20 percent;

Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and

Providing readily accessible areas for recycling by occupants.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts related to transportation. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Utilities and Service Systems

Policy	Description
SSI-14.5	Water Supply. Routinely evaluate the impact of new development proposals in Morgan Hill and require appropriate measures (fees, water supply assessments, etc) to ensure long-term water supplies are available.
SSI-14.8	Sufficient Supply. Ensure that new development does not exceed the water supply.
SSI-16.2	Drainage System Capacity. Ensure that the level of detention or retention provided on the site of any new development is compatible with the capacity of the regional storm drainage system.

City of Morgan Hill Municipal Code

The City of Morgan Hill Municipal Code contains all ordinances for the City. The Municipal Code is organized by Title, Chapter, and Section.

- Chapter 13.04 of the City's Municipal Code describes the rules, rates, and requirements to obtain water service from the City.
- Chapter 15.65, Sustainable Building Regulations. The purpose of Chapter 15.65 of the City's Municipal Code is to assure that commercial and residential development is consistent with the City's environmental agenda to create a more sustainable community by incorporating sustainable building measures into the design, construction, and maintenance of new and existing buildings.
- Chapter 18.64 of the City's Municipal Code is intended to reduce water waste in landscaping by promoting the use of region-appropriate plants that require minimal supplemental irrigation, and by establishing standards for irrigation efficiency. This chapter implements the California Water Conservation in Landscaping Act.

4.19.1.2 Existing Conditions

Water Service

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's water system facilities include 17 groundwater wells, 12 potable water storage tanks, 10 booster stations, and over 180 miles of pressured pipes ranging from two to 14 inches in diameter. The City's water distribution system meets the needs of existing customers.

The City of Morgan Hill relies on groundwater as its sole source of supply. The City relies on water imports from the State Water Project and the federal Central Valley Project for the purpose of groundwater recharge of the sub-basins that supply water to the City (Coyote Valley sub-area of the Santa Clara sub-basin and the Llagas sub-basin). The City's 2020 UWMP (adopted in 2021) determined that there is sufficient supply to meet water demands within the service area through 2045.⁹⁴ The UWMP identified potential shortages which may occur during prolonged years of drought; however, upon implementation of water shortage contingency actions, these shortages can be mitigated in dry-year and multiple dry-year scenarios.

⁹⁴ City of Morgan Hill. 2020 *Urban Water Management Plan*. October 2021. Page 7-4.

Wastewater

The City of Morgan Hill sewer collection system consists of approximately 160 miles of four-inch through 30-inch diameter sewers, three miles of force mains, and 14 sewage lift stations. The “backbone” of the system consists of the trunk sewers, generally 12-inches in diameter and larger, that convey the collected wastewater flows south to the South County Regional Wastewater Authority (SCRWA) Wastewater Treatment Plant.^{95,96} The treatment plant provides service to the cities of Morgan Hill and Gilroy. The treatment plant has capacity to treat an average dry weather flow (ADWF) of 8.5 million gallons per day (mgd) and is currently permitted by the Central Coast RWQCB to treat up to 8.5 mgd.⁹⁷ Currently, Morgan Hill is allocated 42 percent of the treatment plant’s 8.5 mgd capacity, amounting to 3.6 mgd. In 2016, the ADFW in the City was 2.8 mgd, leaving approximately 0.8 mgd of allowable growth within the City’s General Plan before capacity at the plant is reached.⁹⁸

The SCRWA estimated in 2017 that the Wastewater Treatment Plant (WWTP) will reach capacity in 2025. The SCRWA is currently undergoing a WWTP Facility Expansion Project that will expand the existing WWTP capacity from 8.5 mgd to 11 mgd.⁹⁹ The project is estimated for completion by 2024. Project-level CEQA review for the project was completed by SCRWA in August 2020.

The City of Morgan Hill has recently completed significant capital upgrades to increase the capacity of the existing sewer system and reduce overflows. The City completed construction of the Highland Avenue Sewer Upgrade project to provide additional trunk capacity near the intersection of Harding and Highland Avenues in 2018. The City is facilitating infiltration and inflow reduction projects to reduce the amount of rainwater infiltrating the sewer collection system. In addition, a second trunk sewer line is planned to extend from the Highland/Harding intersection in Morgan Hill to Renz Road in Gilroy, which would allow for additional wastewater deliveries to the SCRWA Wastewater Treatment Plant. The trunk sewer line is expected to start construction in the next two years.¹⁰⁰

Storm Drainage

The City of Morgan Hill is divided into several hydrologically distinct drainage areas. Each drainage area has a system of curb and gutter facilities, inlets, conveyance facilities, pumps, and detention basins to collect and dispose of runoff. The stormwater runoff from these areas is ultimately discharged into creeks that flow through the City and are tributary to either Monterey Bay or San Francisco Bay. The drainage areas include Coyote Creek, Fisher Creek, Tennant Creek, Madrone Channel, Butterfield Channel, West Little Llagas Creek, and Llagas Creek. Refer to Section 4.10 Hydrology and Water Quality for additional details about the citywide storm drainage system.

⁹⁵ City of Morgan Hill. *Sewer System Master Plan*. October 2017.

⁹⁶ City of Morgan Hill. *City Council State Report 2163: Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. May 18, 2019.

⁹⁷ Santa Clara Valley Water District. *US Bureau of Reclamation WaterSMART Title XVI Water Reclamation and Reuse Program Funding FY 2017, FOA BOR-DO-17-F002. South Santa Clara County Recycled Water Project (Phases 1B and 2A)*. December 15, 2016. Accessed April June 30, 2022.

<https://www.usbr.gov/watersmart/title/docs/applications/authorized/2017/F002-007santaclara.pdf>

⁹⁸ City of Morgan Hill. *Sewer System Management Plan*. Page 53. February 2018.

⁹⁹ City of Gilroy. South County Regional Wastewater Authority (SCRWA). Accessed April 23, 2021.

<http://www.ci.gilroy.ca.us/561/South-County-Regional-Wastewater-Authori>

¹⁰⁰ City of Morgan Hill. City Council Staff Report 2163. February 6, 2019.

Solid Waste

Recology South Valley provides solid waste and recycling services to the residents and businesses of the City. The City is contracted with Waste Solutions Group of San Benito, LLC. Effective March 2022, the City's waste is hauled to Kirby Canyon landfill in San José or the Monterey Peninsula landfill in Marina. Kirby Canyon Landfill has a projected permitted capacity of approximately 36,400,000 cubic yards (9,828,000 tons) and is expected to remain open through 2059.¹⁰¹¹⁰²

Other Utilities

Refer to Section 4.6, Energy, for a discussion of electricity and natural gas facilities serving Morgan Hill.

4.19.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

¹⁰¹ CalRecycle. SWIS Facility Detail: Kirby Canyon Landfill (43-AN-0008). Accessed August 29, 2022.

<https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/3393>

¹⁰² 1 cubic yard = 0.27 tons.

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
e) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Utilities Conclusions

The Morgan Hill 2035 FEIR concluded that implementation of the 2035 General Plan would result in less than significant utilities and service systems impacts. There would be sufficient water supplies available to serve the General Plan buildup without the need for new or expanded entitlements or new water facilities. The SCRWA treatment plant would be expanded by the year 2024 and this expansion would ensure the treatment plant has adequate capacity to handle wastewater generated from new development proposed under the General Plan. There are also landfills with sufficient permitted capacity to accommodate the solid waste generated from the General Plan future development and solid waste would not be generated in excess of state or federal standards. The General Plan policies and action that promote recycling and conservation would also comply with federal, state, and local status and regulations related to solid waste.

Impact UTL-1:	The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. [Same Impact as Approved Project (Less than Significant Impact)]
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Water Facilities

As described below under Impact UTL-2, there are sufficient water supplies available to serve the planned housing during the 2023-2031 Housing Element Update. As discussed in the Morgan Hill 2035 FEIR, it is possible that existing local distribution lines within the City may be undersized for future development under the General Plan (including some of the Housing Element project locations) and improvements may be needed to replace existing lines with larger diameter pipes. Any new or expanded local water supply and distribution facilities would require permitting and review in accordance with CEQA, which would ensure environmental impacts are disclosed and mitigated to the extent possible. Most of the proposed housing opportunity project locations have been entitled (refer to Table 3.3-1 in Section 3.0 Project Description) and undergone separate environmental review. Future development on any of the vacant or undeveloped Housing Element project locations that have not yet undergone review would be reviewed in accordance with CEQA. For these reasons, any future installation or upgrade to any water facilities would be reviewed pursuant to CEQA to analyze potential significant environmental effects. Therefore, in accordance with the Morgan Hill 2035 FEIR, impacts related to the construction or expansion of water facilities or infrastructure would be less than significant. **[Same Impact as Approved Project (Less than Significant Impact)]**

Wastewater Treatment Facilities

As described below under Impact UTL-3, following the completion of the WWTP Facility Expansion Project in the year 2024, there would be adequate wastewater treatment capacity to serve the Housing Element Update. Therefore, in accordance with the Morgan Hill 2035 FEIR, impacts related to the construction or expansion of wastewater facilities or infrastructure would be less than significant. **[Same Impact as Approved Project (Less than Significant Impact)]**

Storm Drainage

As described in Section 4.10 Hydrology and Water Quality, the General Plan buildout would increase impervious surface area in the General Plan area, which would increase runoff. Buildout under the General Plan, which includes the Housing Element Update, would connect to the existing storm drainage systems. To ensure that the existing storm drainages would be able to adequately serve future developments, all developments would need to adhere to the City's Stormwater Management Guidance Manual for Low Impact Development, Post-Construction Requirements and Storm Drainage Master Plan. The City would then review the drainage system designs for each individual project prior to project approval. The Housing Element Update residential developments would be subject to this review process, which will identify if developments would be required to relocate or construct new storm drainage facilities. For these reasons, the Housing Element Update, would not result in new or more severe impacts to the storm drainage system. **[Same Impact as Approved Project (Less than Significant Impact)]**

Electric Power, Natural Gas, and Telecommunication Facilities

New development under the General Plan (including the Housing Element Update) would continue to be served by PG&E. Future development associated with the General Plan would connect to existing electric power, and telecommunication lines in the Housing Element Update area. The proposed buildings would connect to existing electrical lines and other utilities such as fiber optic, telephone, and cable. The Morgan Hill 2035 FEIR concluded that the buildout of the General Plan would not require or result in the construction of new or expended electric power, natural gas, or telecommunications facilities. As described in Section 4.6 Energy, developments under the General Plan, which includes the Housing Element Update, would also be constructed and designed in a manner to conserve energy use, which would reduce the increased need on existing energy facilities. Therefore, the Housing Element Update would not result in a significant environmental effect from the construction or relocation of natural gas, electricity, or telecommunication utilities. The Housing Element Update would not result in new or more severe impacts to the electric power, natural gas, and telecommunication facilities. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR concluded that there would be sufficient water supplies available to serve buildout of the General Plan from existing entitlements and resources under normal, single-dry, and multiple-dry years.¹⁰³ Future development under the Housing Element Update would be consistent with the buildout projections of the General Plan (Policies SSI-14.1 through SSI-14.13 and Policies NRE-7.1 through NRE-7.5). Pursuant to the requirements of SB 610, a WSA was prepared for the Housing Element Update and the WSA evaluated a total of 2,350 units, which is more units than what the Housing Element Update currently proposed (2,212 residential units).¹⁰⁴ The Project has a projected water demand of approximately 225 acre-feet per year within the Coyote Valley subarea and 131 acre-feet per year within the Llagas subbasin, respectively. Under normal year conditions, the projected water supply availabilities of the Llagas subbasin and Coyote Valley subarea are sufficient to meet the demands of the Project over the next 23 years. Under the single dry year or consecutive dry year scenario, water shortages are anticipated and short-term water use reductions would be needed pursuant to the City's 2020 UWMP. This supply shortage during single dry and consecutive dry years was a condition present in the City's 2020 UWMP and is not caused by the residential growth planned in the 2023-2031 Housing Element specifically. Consistent with the findings in the Morgan Hill 2035 FEIR, with adherence to applicable state and local and the prescribed water conservation policies and actions of the General Plan, in combination with the short-term water use reductions outlined in the City's 2020 UWMP, the Housing Element Update would result in a less than significant impact to water supplies. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. [Same Impact as Approved Project (Less than Significant Impact)]
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The Morgan Hill 2035 FEIR concluded that buildout of the General Plan would require expansion of the SCRWA WWTP. As discussed above in Section 4.19.1.2 Existing Conditions, the SCRWA is currently undergoing a WWTP Facility Expansion Project that will expand the existing WWTP capacity from 8.5 mgd to 11 mgd. The project is estimated for completion by 2024. Project-level CEQA review for the project was completed by SCRWA in August 2020.¹⁰⁵ The Morgan Hill 2035 FEIR concluded that once the treatment plant expansion was complete, wastewater generated by the buildout of the General Plan (including the Housing Element Update) would not exceed the expanded permitted treatment capacity of the SCRWA facility. Future development under the Housing Element Update would be consistent with the buildout projections of the General Plan.

¹⁰³ The analysis in the Morgan Hill 2035 FEIR was based on the City's 2010 UWMP.

¹⁰⁴ Note that the WSA evaluated additional units beyond what are proposed in the Housing Element Update. The number of units and pipeline parcels were reduced after the completion of the WSA.

¹⁰⁵ South County Regional Wastewater Authority. South County Regional Wastewater Authority Wastewater Treatment Plant Facility Expansion Project. Initial Study/Mitigated Negative Declaration. SCH 2020080467. August 2020.

Since the Housing Element Update is consistent with the land use assumptions of the General Plan and the Morgan Hill 2035 FEIR concluded that implementation of the General Plan would result in a less than significant impact related to wastewater treatment, the Housing Element Update would not result in new or greater impacts than those disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact UTL-4: The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that implementation of the General Plan would generate 262,129 pounds per day, or 131 tons per day of solid waste.¹⁰⁶ The FEIR determined that the incremental solid waste generated by buildout under the General Plan is less than three percent of the City's combined daily capacity.¹⁰⁷ As such, buildout of the General Plan would have a less-than-significant impact with regard to daily capacity at the landfill facilities. Since the Housing Element Update is consistent with the land use assumptions of the General Plan and the Morgan Hill 2035 FEIR concluded that implementation of the General Plan would result in a less than significant impact related to solid waste reduction goals, the Housing Element Update would not result in new or greater impacts than those disclosed in the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact UTL-5: The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Morgan Hill 2035 FEIR concluded that buildout of the General Plan (including the Housing Element Update) would not impede the ability of the City to comply with applicable federal, State, and local statutes and regulations related to solid waste. The General Plan includes policies and actions (Policies SSI-17.1 through Action SSI-17.C) that promote recycling and conservation, which help to ensure adequate waste collection and disposal facilities are available in Morgan Hill. Since the Housing Element Update is consistent with the land use assumptions and buildout projections of the General Plan, the Housing Element Update would be consistent with the findings of the Morgan Hill 2035 FEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

¹⁰⁶ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Page 4.15-43. January 2016.

¹⁰⁷ Ibid.

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Code of Regulations Title 14

The California Board of Forestry and Fire Protection has adopted regulations, known as SRA Fire Safe Regulations, which apply basic wildland fire protection standards for building, construction, and development occurring in a SRA. The future design and construction of structures, subdivisions and developments in SRAs are required to provide for the basic emergency access and perimeter wildfire protection measures discussed in Title 14.

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the SCU Unit, which covers the Housing Element Update area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to wildfire impacts. The following policies are applicable to the Housing Element Update.

Morgan Hill 2035 General Plan Policies: Wildfire Hazards

Policy	Description
SSI-3-1	Development in Fire Hazard Areas. Minimize development in fire hazard areas and plan and construct permitted development so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire.
SSI-3-2	Wildfire Risks. Avoid actions which increase fire risk, such as increasing public access roads in fire hazard areas, because of the great environmental damage and economic loss associated with a large wildfire.
SSI-3-3	Public Facilities Location. Locate, when feasible, new essential public facilities outside of high fire risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identify construction methods or other methods to minimize damage if these facilities are located in a state responsibility area or very high fire hazard severity zone.
SSI-3-4	Adequate Infrastructure. Design adequate infrastructure if a new development is located in a state responsibility area (SRA) or in a very high fire hazard severity zone (VHFHSZ) or high fire hazard severity zone (HFHSZ) as indicated on the City of Morgan Hill Wildland Urban Interface map (adopted March 18, 2009), including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
SSI-3-5	Fire Risks. Work cooperatively with CAL FIRE and other public agencies with responsibility for fire protection to reduce fire risks in Morgan Hill.

Morgan Hill 2035 General Plan Policies: Wildfire Hazards

Policy	Description
SSI-3-6	Fire Hazard Severity Zones. Continue to support special High Risk Fire Hazard Severity Zones requirements.
SSI-12.4	Maintenance of Emergency Access Routes. Require that emergency access routes be kept free of traffic impediments.
SSI-12.5	Emergency Response Plan. Maintain comprehensive Emergency Response Plans.
SSI-12.6	Accessibility. Continue restricting development in areas of poor accessibility. Discourage Development should not be allowed in areas where access is provided by a single road that could be damaged by faulting or landslides, or where access could be cut off by wildfires, trapping residents or workers. (SCJAP 15.07) [Policy PHS-4d]
SSI-12.A	Emergency Access. Where appropriate, allow development in areas where a second improved access road has been provided for emergency escape. (SCJAP 15.07) [Action PHS-2.8]

City of Morgan Hill Municipal Code

Section 15.44.190 of the Municipal Code provides requirements and guidance for the development of structures within a Wildland-Urban Interface Area, including the preparation of a Fire Protection Plan to be reviewed and approved by the City.

The [Fire Protection] plan shall be based upon a site-specific wildfire risk assessment that includes considerations of location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management, evacuation routes, peak load water supply requirements, and minimum road widths, as those items relate to identified fire hazards.

4.20.1.2 Existing Conditions

Morgan Hill's Fire Hazard Severity Zones range from Moderate to High.¹⁰⁸ These zones are primarily located in hillside areas. According to CAL FIRE, two of the Housing Element Update sites (Site 16 and 19) are located in a Very High Fire Hazard Severity Zone.¹⁰⁹

¹⁰⁸ City of Morgan Hill. *Morgan Hill 2035 DEIR*. Figure 4.8-2. January 2016.

¹⁰⁹ CAL FIRE. "FHSZ Viewer." Accessed April 19, 2022. <https://egis.fire.ca.gov/FHSZ/>

4.20.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, Would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morgan Hill 2035 Final EIR – Wildfire Conclusions

The Morgan Hill 2035 FEIR concluded that implementation of the General Plan would have less than significant wildfire impacts. As discussed in Section 4.20.1.2 Existing Conditions, two of the Housing Element Update project locations (Location 16 and 19) are located in a Very High Fire Hazard Severity Zone.¹¹⁰ Consistent with the Morgan Hill Municipal Code (Section 15.44.190), future development in Wildland-Urban Interface areas¹¹¹ would require preparation of a site-specific Fire Protection Plan. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management, evacuation routes, peak load water supply requirements, and minimum road widths, as those items relate to identified fire hazards. Compliance with applicable federal, state, local laws and regulations, combined with General Plan policies and strategies, would ensure that impacts from wildfire hazards would be less than significant. **[Same Impact as Approved Project (Less than Significant Impact)]**

¹¹⁰ CAL FIRE. FHSZ Viewer. Accessed April 19, 2022. <https://egis.fire.ca.gov/FHSZ/>

¹¹¹ Wildland-Urban Interface Fire Area is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the City to be at a significant risk from wildfires.

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

Bay Area Air Quality Management District (BAAQMD). *CEQA Thresholds and Guidelines Update*. Accessed May 27, 2022. Available at: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>

- _____. *CEQA Thresholds for Evaluating the Significance of Climate Impacts*. April 2022. Accessed May 27, 2022. Available at: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en>
- _____. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

California Department of Forestry and Fire Protection (CAL FIRE). “FHSZ Viewer”. Accessed April 19, 2022. <https://egis.fire.ca.gov/FHSZ/>

California Air Resources Board (CARB). “Overview: Diesel Exhaust and Health.” Accessed May 25, 2022. <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

_____. “The Advanced Clean Cars Program.” Accessed June 17, 2022. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>

California Building Standards Commission. “California Building Standards Code.” Accessed June 17, 2022. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

California Department of Conservation. “Earthquake Zones of Required Investigation”. Accessed June 6, 2022. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

_____. “Farmland Mapping and Monitoring Program.” Accessed April 19, 2022. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

_____. “Williamson Act.” <http://www.conservation.ca.gov/dlrp/lca>.

_____. California Important Farmland Finder. Accessed April 19, 2022. <https://maps.conservation.ca.gov/dlrp/ciff>

_____. *Guidelines for Classification and Designation of Mineral Lands*. N.d.

California Department of Finance. Population and Housing Estimates for Cities, Counties, and the State, 2021-2022 with 2020 Census Benchmark. Site accessed July 11, 2022. <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>

California Department of Forestry and Fire Protection. “Fire and Resource Assessment Program.” Accessed April 19, 2022. <http://frap.fire.ca.gov/>.

California Department of Housing and Community Development. “Regional Housing Needs Allocation and Housing Elements” Accessed June 20, 2022. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

California Department of Tax and Fee Administration. “Net Taxable Gasoline Gallons.” Accessed May 13, 2022. <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>.

California Department of Transportation. “Scenic Highways.” Accessed April 19, 2022. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.

California Emergency Management Agency. “California Official Tsunami Inundation Map.” Accessed September 16, 2021. <https://www.conservation.ca.gov/cgs/tsunami/maps>

California Energy Commission (CEC). “2019 Building Energy Efficiency Standards.” Accessed June 17, 2022. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.

_____. “Natural Gas Consumption by County.” Accessed May 13, 2022. Available at: <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

California Energy Commission. Energy Consumption Data Management System. “Electricity Consumption by County.” Accessed May 13, 2022. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

California Environmental Protection Agency (CalEPA). “Cortese List Data Resources.” Accessed April 19, 2022. <https://calepa.ca.gov/sitecleanup/corteselist/>.

California Gas and Electric Utilities. 2020 *California Gas Report*. Accessed May 13, 2021. Available at: https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf

California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” Accessed June 9, 2022. <http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>.

California Regional Water Quality Control Board San Francisco Region. *Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008*. May 11, 2022

CalRecycle. *SWIS Facility Detail: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Accessed July 12, 2019. <https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005>.

City of Gilroy, City of Morgan Hill, and County of Santa Clara. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements*. June 2015.

City of Gilroy. “South County Regional Wastewater Authority (SCRWA).” Accessed April 23, 2021. <http://www.ci.gilroy.ca.us/561/South-County-Regional-Wastewater-Authori>

City of Morgan Hill. *Morgan Hill 2035 DEIR*. Figure 4.2-1. January 2016.

- _____. *Morgan Hill 2035 DEIR*. Figure 4.2-1. January 2016
- _____. *Morgan Hill 2035 DEIR*. Figure 4.2-3. January 2016
- _____. *Morgan Hill 2035 DEIR*. Figure 4.8-2. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Page 4.2-11. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Page 4.3-17. January 13, 2016.
- _____. *Morgan Hill 2035 DEIR*. Page 4.4-12. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Pages 4.4-10-4.4-11. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Page 4.5-17. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Pages 4.9-16 and 4.9-17. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Page 4.15-43. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Page 7-1. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Table 3-2. January 2016.
- _____. *Morgan Hill 2035 DEIR*. Table 4.5-1. January 2016.
- _____. *Morgan Hill 2035 EIR*. Table 4.11-5. January 2016.
- _____. *Morgan Hill 2021 Climate Action Plan*. December 15, 2021. <https://www.morgan-hill.ca.gov/DocumentCenter/View/40166/Climate-Action-Plan-Draft-December-9-2021-?bidId=>
- _____. “Fire”. Accessed May 31, 2022. Available at: <https://www.morgan-hill.ca.gov/445/Fire>
- _____. *2018 Storm Drainage System Master Plan*. September 2018.
- _____. *2020 Urban Water Management Plan*. October 2021. Page 7-4.
- _____. City Council Staff Report 2163. February 6, 2019.
- _____. *City Council State Report 2163: Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. May 18, 2019.
- _____. *City of Morgan Hill Fiscal Years 2020-2021 and 2021-2022 Operating and CIP Budget*. April 17, 2020. Accessed May 31, 2022. Available at: <https://user-ddhj25y.cld.bz/City-of-Morgan-Hill-Fiscal-Years-2020-2022-Recommended-Operating-and-CIP-Budgets/14/>.
- _____. *City of Morgan Hill Housing Element 2023-2031*. Appendix H1. Housing Needs Assessment.
- _____. Morgan Hill wishes Police Chief David Swing well in his new role”. March 11, 2020. Accessed May 31, 2022. Available at: <http://www.morgan-hill.ca.gov/CivicAlerts.aspx?AID=1553&ARC=3154>.
- _____. Municipal Code Chapter 18.60 – Historic Resources.
- _____. *Sewer System Management Plan*. Page 53. February 2018.

_____. *Sewer System Master Plan*. October 2017.

County of Santa Clara – Department of Planning and Development. *Historic Context Statement*. December 2004. Revised February 2012.

County of Santa Clara. SCCMap. Accessed June 6, 2022. Available at:
<https://ges.sccgov.org/discovergis/sccmap>

_____. Williamson Act Properties. Accessed July 16, 2022.
<https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce>

Department of Toxic Substances Control. “EnviroStor for the City of Morgan Hill”. Accessed June 2, 2022. Available at: <https://www.envirostor.dtsc.ca.gov/public/>

Federal Transit Administration. *Transit Noise and Vibration Assessment Manual*. September 2018.

Metropolitan Transportation Commission/Association of Bay Area Governments. Hazard Viewer Map. Accessed June 6, 2022. Available at:
<https://www.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>

_____. Priority Development Areas (Plan Bay Area 2050). Accessed June 19, 2022.
<https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2050/explore?location=37.117102%2C-121.671554%2C13.93>

Morgan Hill Unified School District (MHUSD). “About”. Accessed May 31, 2021. Available at:
<https://www.mhusd.org/about>

Office of Planning and Research. “CEQA Review of Housing Projects Technical Advisory.” Accessed April 19, 2022. https://opr.ca.gov/docs/20190208-TechAdvisory-Review_of_Housing_Exemptions.pdf.

Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007*. Accessed May 13, 2022. Available at: <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County San Martin Airport*. Figure 5. Accessed June 6, 2022. Available at:
https://stgenpln.blob.core.windows.net/document/ALUC_E16_CLUP.pdf

Santa Clara Valley Water District. *US Bureau of Reclamation WaterSMART Title XVI Water Reclamation and Reuse Program Funding FY 2017, FOA BOR-DO-17-F002. South Santa Clara County Recycled Water Project (Phases 1B and 2A)*. December 15, 2016. Accessed April 19, 2021.
<https://www.usbr.gov/watersmart/title/docs/applications/authorized/2017/F002-007santaclara.pdf>

Silicon Valley Clean Energy. “Clean Energy Choices”. Accessed May 27, 2022. Available at:
<https://www.svcleanenergy.org/choices/>

South County Regional Wastewater Authority. South County Regional Wastewater Authority
Wastewater Treatment Plant Facility Expansion Project. Initial Study/Mitigated Negative
Declaration. SCH 2020080467. August 2020.

State Water Resources Control Board.. “GeoTracker for the City of Morgan Hill”. Accessed June 2,
2022. Available at: <https://geotracker.waterboards.ca.gov/>

U.S. Census Bureau. “QuickFacts Morgan Hill city, California”. Accessed May 18, 2022.
<https://www.census.gov/quickfacts/fact/table/morganhillcitycalifornia,sanbrunocitycalifornia/POP010210>

United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed May 13, 2022. Available at: <http://www.afdc.energy.gov/laws/eisa>.

United States Department of the Interior. “Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.” Accessed April 19, 2022.
<https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

United States Energy Information Administration. “California State Energy Profile.” Last Updated March 17, 2022. Accessed May 27, 2022. Available at: <https://www.eia.gov/state/?sid=CA#tabs-3>

United States Environmental Protection Agency (EPA). “Summary of the Resource Conservation and Recovery Act.” Accessed May 11, 2020. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

- _____. “Superfund: CERCLA Overview.” Accessed April 19, 2022.
<https://www.epa.gov/superfund/superfund-cercla-overview>.
- _____. “The 2021 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975.” November 2021. Accessed May 13, 2022. Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013L1O.pdf>.

Valley Water. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins. November 2021.*

SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Morgan Hill

Development Services Department

Jennifer Carman, *Development Services Director*

Adam Paszkowski, *Principal Planner*

6.2 CONSULTANTS

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Environmental Consultants and Planners

Akoni Danielsen, *Principal Project Manager*

Natalie Noyes, *Senior Project Manager*

Mimi McNamara, *Associate Project Manager*

SECTION 7.0 ACRONYMS AND ABBREVIATIONS

2017 CAP	2017 Clean Air Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
ALUC	Airport Land Use Commission
AMI	Area Median Income
APN	Assessor's Parcel Number
ATCM	Air Toxics Control Measure
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
BMP	Best Management Practices
Btu	British Thermal Unit
CAAQS	California Ambient Air Quality Standard
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	Methane
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level

CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DNL	Day/Night Average Sound Level
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
General Plan 2035	2035 General Plan City of Morgan Hill
GHG	Greenhouse Gases
GWh	Gigawatt Hour
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
HCD	California Department of Housing and Community Development
HHC	Historical Heritage Commission
HSWA	Hazardous and Solid Waste Amendments
IP	Industrial Park
Leq	Energy-Equivalent Sound/Noise Descriptor
Lmax	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MHUSD	Morgan Hill Unified School District
MMI	Modified Mercalli Intensity
MMTCO ₂ e	Million Metric Tons of Carbon Dioxide Equivalent

MND	Mitigated Negative Declaration
mpg	Miles per Gallon
MSL	Mean Sea Level
MTC	Metropolitan Transportation Commission
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act of 1966
NO ₂	Nitrogen Dioxide
NOA	Notice of Availability
NOD	Notice of Determination
NOD	Notice of Determination
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	Ozone
PCB	Polychlorinated Biphenyls
PDA	Priority Development Areas
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM ₁₀	Particulate matter with a diameter of 10 microns or less
PM _{2.5}	Particulate matter with a diameter of 2.5 microns or less
PPV	Peak Particle Velocity
Preservation Program	Agricultural Lands Preservation Program
RCRA	Resource Conservation and Recovery Act
RDCS	Residential Development Control System
RHNA	Regional Housing Needs Allocation
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill

SB	State Bill
SCCDEH	Santa Clara County Department of Environment Health
SCS	Sustainable Communities Strategy
SF ₆	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO _x	Sulfur Oxides
SRA	State Responsibility Area
SVCE	Silicon Valley Clean Energy
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
Title 24	Title 24, Part 6 of the California Code of Regulations
TSCA	Toxic Substances Control Act
UGB	Urban Growth Boundary
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
Valley Water	Santa Clara Valley Water District
VMT	Vehicle Miles Traveled
VTA	Santa Clara Valley Transportation Authority
WAS	Water Supply Assessment
Williamson Act	California Land Conservation Act
WUI	Wildland-Urban Interface



CITY OF MORGAN HILL

WATER SUPPLY ASSESSMENT

FOR

**2023 - 2031 Housing
Element Update**

FINAL

April 2022

Prepared by:

A K E L
ENGINEERING GROUP, INC.





Smart Planning Our Water Resources

April 5th, 2022

City of Morgan Hill
Development Services Department
17575 Peak Avenue
Morgan Hill, CA 95037

Attention: Adam Paszkowski, CPD
Principal Planner

Subject: Water Supply Assessment For 2023-2031 Housing Element Update - Final
(SB 610 Requirements)

Dear Adam:

We are pleased to submit this Water Supply Assessment (WSA) final report for future residential developments included in the ongoing Morgan Hill 2023 - 2031 Housing Element Update. This report is intended to satisfy the requirements of SB 610 by evaluating the impact of this project on existing and future water supplies.

The report quantifies this project's water supply requirements, the potential impact on the City's supply availability, discussions on the supply reliability, and supply vs. demand comparisons.

Sincerely,

AKEL ENGINEERING GROUP, INC.

A handwritten signature in blue ink, appearing to read "Tony Akel".

Tony Akel, P.E.
Senior Principal

Enclosure: Report

**City of Morgan Hill
Water Supply Assessment
For 2023-2031 Housing Element Update**

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**City of Morgan Hill
Water Supply Assessment
For 2023-2031 Housing Element Update**

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APPENDIX A - Final Morgan Hill HE Opportunity Sites

APPENDIX B - Water Shortage Levels

APPENDIX C - Shortage Response Actions

WATER SUPPLY ASSESSMENT FOR 2023-2031 HOUSING ELEMENT UPDATE

1.0 PROJECT BACKGROUND

1.1 Purpose

Law

10912 (b) ...*If a public water system has fewer than 5,000 service connections, then “project” means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system’s existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system’s existing service connections.*

SB 610 (2) ...*The bill would require the assessment to include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts. The bill would require the city or county, if it is not able to identify any public water system that may supply water for the project, to prepare the water supply assessment after a prescribed consultation.*

This Water Supply Assessment (WSA) report is intended to satisfy the requirements of Senate Bill (SB) 610, which was adopted by the California State Legislature to address some of the uncertainties in the water supply and gain a more detailed understanding of the water availability for different projects. The study area of this WSA consists of the proposed housing development (Project) within the City of Morgan Hill’s (City) Sphere of Influence (SOI) Area from 2023 to 2031. This WSA assesses the water supply sufficiency to the projected water demands by evaluating the impact of this Project’s water demands on the water supplies through a 20-year horizon, as stipulated in the SB 610 requirements.

Pursuant to California Water Code Division 6, Part 2.10, Sections 10910-10915, any city or county, which has proposed larger developments or land use plans that are subject to California Environmental Quality Act (CEQA), is required to prepare Water Supply Assessment (WSA) to document potential environmental impacts of the projects.

The report includes a discussion of this Project’s water supply requirements and potential impact on the City’s supply availability. This report references multiple land use planning and groundwater supply documents, including the City of Morgan Hill 2020 Urban Water Management Plan (2020 UWMP), the City of Morgan Hill 2021 Water System Master Plan (2021 WSMP), the

City of Morgan Hill 2035 General Plan (2035 GP), the Valley Water 2020 Regional Urban Water Master Plan (2020 RUWMP), and the Valley Water 2021 Groundwater Management Plan Draft (2021 GMP).

1.2 Relevant Reports

Several reports provide detailed information and factual data related to this analysis. Exhibits from these reports were included in the appendices for ease of reference.

- **City of Morgan Hill Water System Master Plan, December 2021 (2021 WSMP).** The City's 2021 Water System Master Plan presents historical and projected water demands, identifies existing and future water system capacity deficiencies, recommends projects to correct these deficiencies, and identifies major water facilities for servicing future developments.
- **City of Morgan Hill Urban Water Management Plan, October 2021 (2020 UWMP).** The 2020 Urban Water Management Plan (UWMP) establishes a benchmark per capita water usage and targets in order to achieve higher levels of water conservation for the sustainability of water supply sources. This includes adopting an updated water shortage contingency plan, defining supply sources, addressing supply reliability, and projecting sustainable supply yields and future demands.
- **City of Morgan Hill 2035 General Plan, July 2016 (2035 GP).** The City's 2035 General Plan provides future land use planning and growth assumptions for the planning areas. California State law requires that the Housing Element must be consistent and compatible with other elements included in the General Plan.
- **City of Morgan Hill Housing Element Update 2015-2023, February 2015 (2015 HE).** This Housing Element expands and includes comprehensive statements of housing needs and goals of the City. This Update focused on the 2015 - 2023 planning period, identified the potential housing needs for different groups, and provided an adequate supply of housing to meet the projected needs.
- **Final Morgan Hill Housing Element Opportunity Sites from 2023 to 2031, January 2022 (2023 HE Sites).** The City is in the process of updating the Housing Element for the planning period of 2023 - 2031. Based on the City's past Housing Element, this HE Update documents the planned future land use within the City limits during the 2023 - 2031 time window. The proposed housing development is used to estimate future water demands.
- **Valley Water 2021 Groundwater Management Plan Draft, October 2021 (2021 GWMP Draft).** This Groundwater Management Plan, prepared by the Santa Clara Valley Water District (Valley Water), fulfills the requirements of the 2014 California Sustainable Groundwater Management Act (SGMA) for the Santa Clara and Llagas subbasins. This GWMP establishes local sustainable management criteria and identifies projects intended

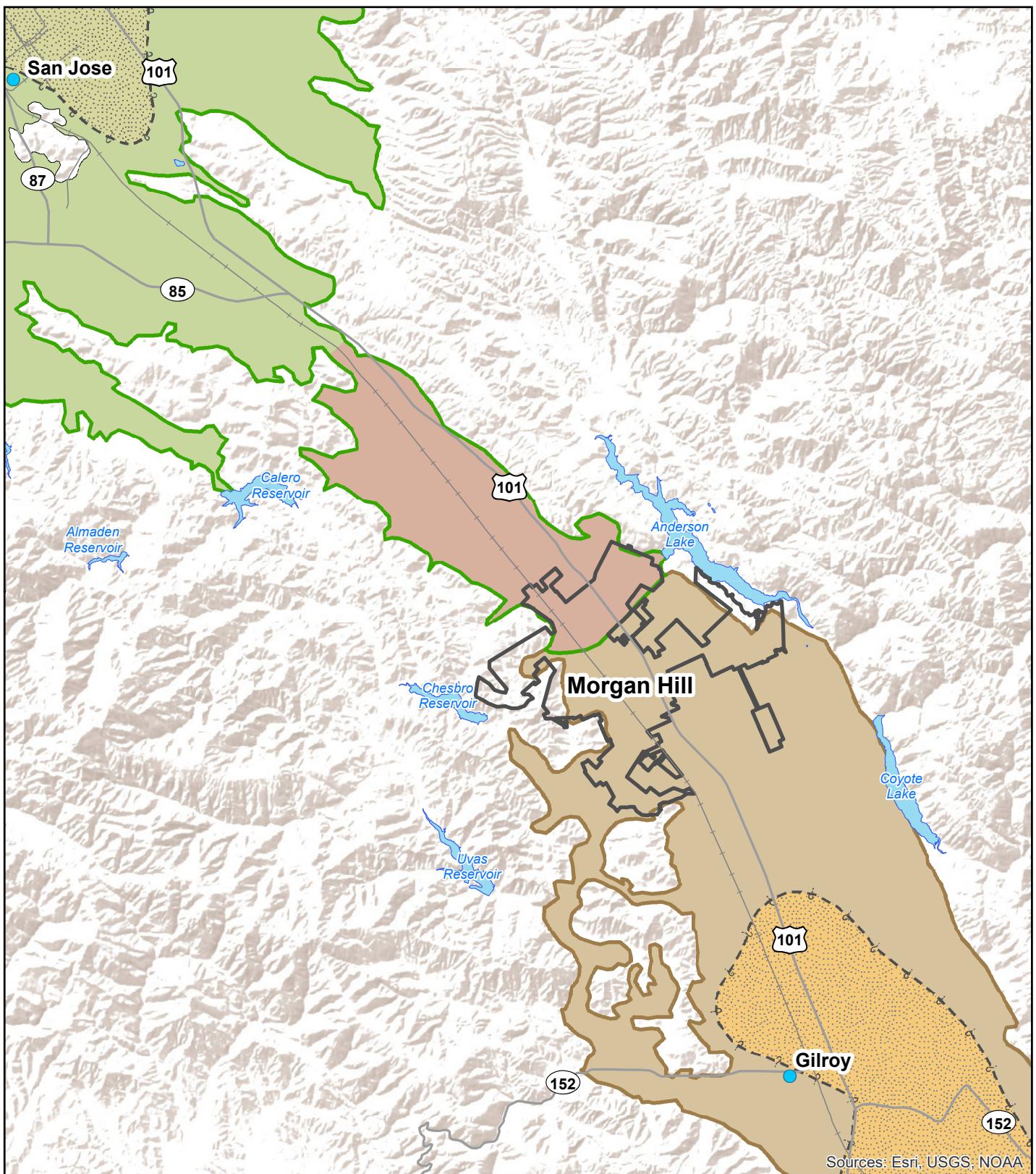
to achieve sustainability throughout the basin by the year 2045. This report is still in the process of being completed and draft chapters were used as available.

- **Valley Water 2020 Regional Urban Water Management Plan, June 2021 (2020 RUWMP).** Valley Water's 2020 UWMP documents current and projected water supplies and demands over the next 25 years during normal and drought years, as well as water shortage contingency planning and conservation efforts. This RUWMP summarizes the boundaries and hydrogeological characteristics of the Santa Clara and Llagas Subbasins. This report also includes information regarding historic trends in groundwater levels, storage, and quality. It also includes information regarding annual operations, sustainable groundwater management, and other system-wide water management.
- **South County Supply Document, August 2021.** This document, provided by Valley Water staff on August 5, 2021, lists projected future water supplies for both the Coyote subarea and Llagas subbasin. It is the source of the projected available water supply every 5 years from 2025 to 2045.
- **City of Morgan Hill Official Website.** City of Morgan Hill operates its official website as one approach for public outreaching, maintains it regularly, and posts the latest city-wide progress. Therefore, information from the Development Projects section ([Development Projects | City of Morgan Hill, CA - Official Website](#)) is one of the sources to obtain information on proposed developments in this water supply assessment.

1.3 Proposed Development Description

The City is located in Santa Clara County and above two groundwater subbasins: the Llagas subbasin of the Gilroy-Hollister Groundwater Basin (Subbasin 3-003.01) and the Santa Clara subbasin of the Santa Clara Valley Groundwater Basin (Subbasin 2-009.02) ([Figure 1](#)). The Project includes 22 proposed housing developments within the City's SOI, covering 6 types of residential land use and 2 types of mixed use: Residential Estate, Residential Detached Low, Residential Detached Medium, Residential Attached Low, Residential Attached Medium, Residential Attached High; Mixed Use and Mixed Use Flex. These developments are listed in [Table 1](#) and depicted in [Figure 2](#), and briefly described as follows:

- **Residential Estate (RE):** In the City's 2035 GP, residential estate land use is defined as detached homes with a net density of up to 1 residential unit per acre. The 2023-2031 Housing Element Update includes 1 proposed residential estate development with 4 units on top of approximately 4.6 acres area on south of Llagas Road, along Rose Orchard Court. This development is consistent with the land use density documented in the City's 2035 GP.



Legend

Groundwater Subbasins

Santa Clara Confined Area

DWR Subbasins

Coyote Valley Recharge Area

Llagas (3-3.01)

Llagas Recharge Area

Llagas Confined Area

Bedrock

Hydrographic Units

Santa Clara Plain Recharge Area

Approximate Extent of Confined Area

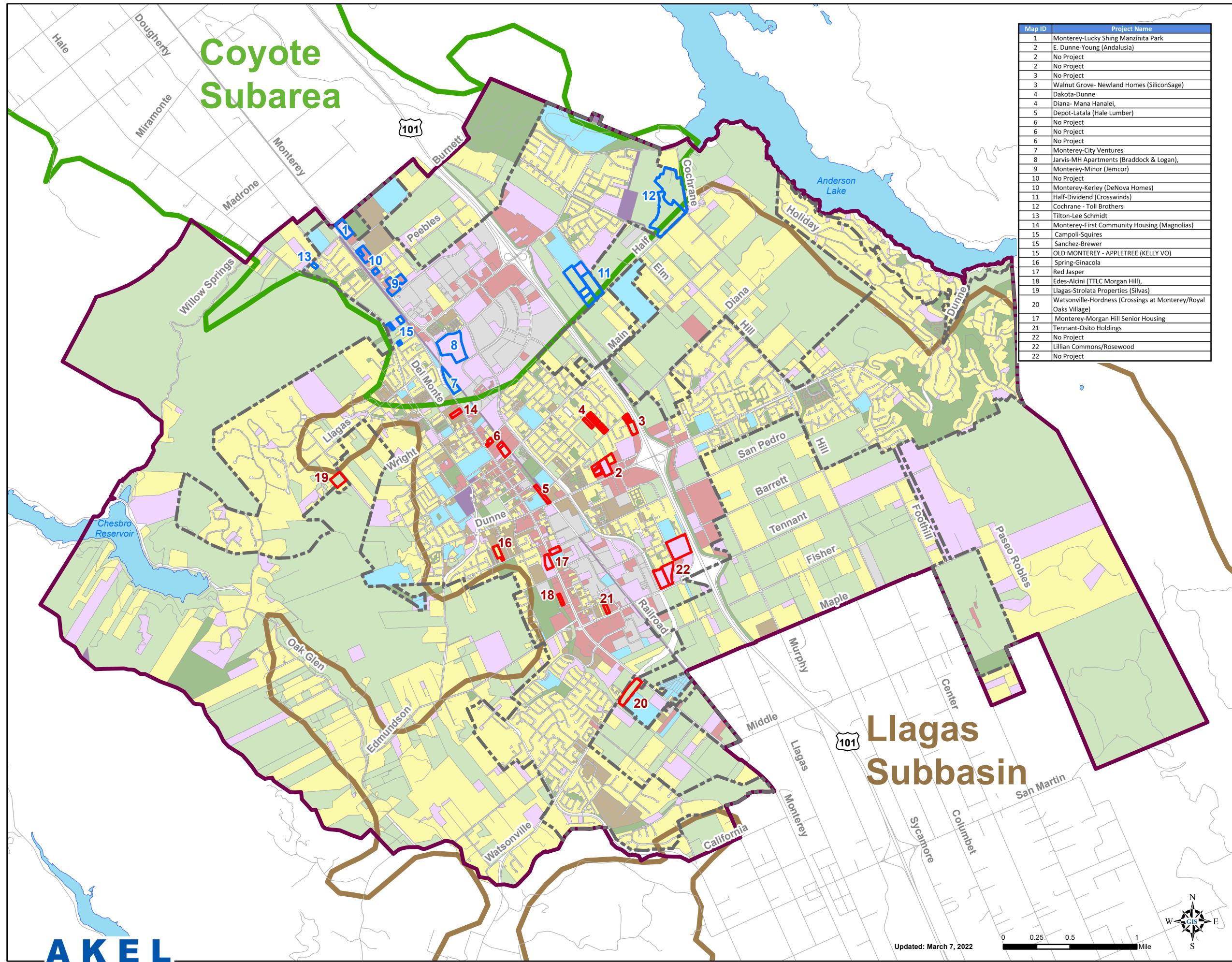
0 0.5 1 2 Miles
N E
W S

Updated: May 13, 2021

Figure 1
Groundwater Subbasins
WSA for 2023 - 2031 Housing
Element Update
City of Morgan Hill



Coyote Subarea



Legend

HE Opportunity Sites

- Parcels within Coyote Subarea
- Parcels within Llagas Subbasin

Existing Land Use

- Agriculture
- Parks
- Single-Family
- Multi-Family
- Commercial
- Industrial
- Public/Institutional
- Vacant
- Other

Groundwater Subbasins

- Coyote
- Llagas

Roads

City Limits

Sphere of Influence Boundary

Lakes

Figure 2

Housing Element Opportunity Sites

WSA for 2023 - 2031 Housing Element Update
City of Morgan Hill



Table 1 Proposed Housing Projects

Water Supply Assessment for 2023-2031 Housing Element Update
City of Morgan Hill

Proposed Land Use Type ¹	Map ID ¹	Project Name ¹	GP Density Consistency ¹	Entitlement Status ¹	Proposed Units ¹	Proposed Area ¹ (net acre)	Total Area (net acre)
Santa Clara Subbasin (Coyote)							
Residential Detached Low	12	Cochrane - Toll Brothers	TRUE	PENDING, expect to be entitled prior to HE update and Environmental Impact Report (EIR)	137	54.42	55.20
	13	Tilton-Lee Schmidt	TRUE	Entitled	2	0.78	
Residential Detached Medium	15	Campoli-Squires	TRUE	Entitled	1	0.74	
	15	Sanchez-Brewer	TRUE	Entitled	1	0.24	2.11
	15	Old Monterey - Appletree (Kelly Vo)	TRUE	Entitled	7	1.13	
Residential Attached Low	9	Monterey-Minor (Jemcor)	TRUE	Entitled	249	7.52	
	11	Half-Dividend (Crosswinds)	TRUE	PENDING, expect to be entitled prior to HE update and EIR	269	28.88	36.40
Residential Attached Medium	8	Jarvis-MH Apartments (Braddock & Logan)	TRUE	Entitled	389	19.50	19.50
Mixed Use Flex	1	Monterey-Lucky Shing Manzinita Park	TRUE	PENDING, expect to be entitled prior to HE update and EIR	67	5.83	
	7	Monterey-City Ventures	TRUE	Entitled	101	6.69	
	10	No Project	TRUE	No Project	14	0.90	18.02
	10	Monterey-Kerley (DeNova Homes) ^{2,3}	TRUE	PENDING, expect to be entitled prior to HE update and EIR	93	4.60	
					Subtotal	1,330	131.23
Llagas Subbasin							
Residential Estate	19	Llagas-Strolata Properties (Silvas)	TRUE	Entitled	4	4.60	4.60
Residential Detached Medium	3	No Project	TRUE	No Project	13	3.40	
	3	Walnut Grove- Newland Homes (SiliconSage)	TRUE	Entitled	11	1.61	
	4	Dakota-Dunne	TRUE	Entitled	6	1.22	9.88
	4	Diana- Mana Hanalei	TRUE	Entitled	24	3.65	
Residential Attached Low	16	Spring-Ginacola	TRUE	Entitled	22	2.78	
	21	Tenant-Osito Holdings	TRUE	Entitled	16	0.99	3.77
Residential Attached Medium	2	E. Dunne-Young (Andalusia)	TRUE	Entitled	46	2.33	
	2	No Project	TRUE	No Project	36	2.30	
	22	No Project	TRUE	No Project	83	5.22	16.20
	22	No Project	TRUE	No Project	101	6.35	
Residential Attached High	14	Monterey-First Community Housing (Magnolias) ⁴	FALSE	Entitled	66	1.54	1.54
Mixed Use	5	Depot-Latala (Hale Lumber)	TRUE	Entitled	49	2.05	
	6	No Project	TRUE	No Project	40	2.52	
	6	No Project	TRUE	No Project	14	0.87	6.35
	6	No Project	TRUE	No Project	14	0.91	
Mixed Use Flex	2	No Project	TRUE	No Project	76	4.84	
	17	Red Jasper	TRUE	Potential Project	103	2.93	
	17	Monterey-Morgan Hill Senior Housing	TRUE	Entitled	82	1.89	
	18	Edes-Alcini (T TLC Morgan Hill)	TRUE	PROPOSED, NOT expected to be entitled prior to HE update or EIR	21	1.10	28.43
	20	Watsonville-Hordness (Crossings at Monterey/Royal Oaks Village)	TRUE	Entitled	73	8.19	
	22	Lillian Commons/Rosewood	TRUE	Entitled	120	9.48	
					Subtotal	1,020	70.77
					Total	2,350	202.00

AKEL

Montgomery Street, Inc.

Notes:

1. Source: Final Morgan Hill HE Opportunity Sites received from City staff on 1/7/2022.

2. Monterey-Kerley (DeNova Homes) proposed project site is documented as 1.05 acres in the Final Morgan Hill 2023 HE Opportunity Sites file received from the City staff on 1/7/2022.

3. Based on the City's geodatabase provided by the City staff and the project information posted on the City's website, the project site is approximately 4.6 acres, which is closer to the actually parcel size.

4. Monterey-First Community Housing (Magnolias) proposed land use has higher density (43 units per acre) than it was documented in City of Morgan Hill 2035 General Plan (Mixed Use Flex, 7-24 units per acre).

7/24/2022

- **Residential Detached Low (RDL):** Residential Detached Low land use is designated for detached homes of which net density is more than 1 unit per acre but less than 4 units per acre. The proposed residential detached low development is comprised of 139 units, approximately 55.2 net acres. The majority of the proposed development is located along Cochrane Road and Half Road, and the existing land use consists of residential and open space land uses. This development is consistent with the land use density documented in the City's 2035 GP.
- **Residential Detached Medium (RDM):** Similar to Residential Detached Low land use, residential detached medium land use refers to land use for detached homes with net density falling in the range of 4 - 7 units per acre. The proposed residential detached medium developments consist of 7 projects, 63 units, which are primarily located in the middle and the northwest corner of the City, covering approximately 12.0 net acres area. The existing land use currently consists of open spaces. These developments are consistent with the land use density documented in the City's 2035 GP.
- **Residential Attached Low (RAL):** The residential attached low development is defined as detached or attached homes with net density within the range of 6 - 12 units per acre. The proposed RAL development consists of 556 units, approximately 40.2 acres, of attached homes, along both sides of Highway 101. The proposed RAL development is primarily comprised of 4 projects, The existing land use currently consists of open space, commercial, and residential land uses. These developments are consistent with the land use density documented in the City's 2035 GP.
- **Residential Attached Medium (RAM):** Within the City limits, along the west side of Highway 101, between Cochrane Road and West Dunne Avenue, locate the proposed residential attached medium developments, which are primarily comprised of attached homes (16 - 24 units/acre). This development includes 5 proposed projects, 655 units on top of approximately 35.7 net acres area. The existing land use currently consists of open space and residential land uses. These developments are consistent with the land use density documented in the City's 2035 GP.
- **Residential Attached High (RAH):** The 2023 HE Update contains 1 residential attached high project (Monterey-First Community Housing (Magnolias)), which is located between Monterey Road and Del Monte Avenue. This project is approximately 1.5 net acres, includes 66 proposed units. The existing land use currently consists of commercial buildings.

It should be noted that this development has a differing net density (42.9 units/acre) than the land use designation documented in the 2035 GP (Mixed Use Flex, 7 - 24 units/acre). Therefore, this project is categorized as RAH land use (attached homes, 24 - 46 units/acre). The increase in land use net density is expected to result in higher water

demand than the projection documented in the 2020 UWMP, which is discussed in detail in Section 2.

- **Mixed Use (MU):** Mixed use is designated for attached homes mixed with retail, office, services land use, and the net density shall be consistent with the City's Down Town Specific Plan. The proposed mixed use development consists of 4 projects, including 117 units (approximately 6.4 net acres), along the west side of Monterey Street, within the downtown area. This development is consistent with the land use density documented in the City's 2035 GP.
- **Mixed Use Flex (MU-F):** The 10 proposed mixed use flex is located at different sites within the City's SOI boundary, including 750 units (approximately 42.9 net acres) was documented in the 2023 HE Sites. Note that, the proposed Monterey-Kerley (DeNova Homes) development site is documented as 4.6 acres on the City's website (<http://www.morgan-hill.ca.gov/2263/Monterey-Kerley-DeNova-Homes>) and geodatabase provided by City staff, while it is listed as 1.05 acres in the 2023 HE Sites. This project site area of 4.6 acres has been confirmed by City staff. Therefore, in this report, 4.6 acres is used as the proposed DeNova Homes area, which will result in 46.5 net acres of MU-F land use in total.

1.4 Opportunity Sites

The proposed housing development opportunity sites are located inside the existing City limits as defined in the 2021 WSMP, as shown in [Figure 1](#); while approximately 131.2 acres of development are within the Coyote Valley subarea and the rest approximately 70.8 acres of development located on top of Llagas groundwater subbasin. The existing land use of this Project consists of residential, commercial, and open space land uses. The City's existing General Plan land use map designates the project sites as various land uses, including residential and mixed use types.

The proposed net density for the No.14 project (Monterey-First Community Housing (Magnolias)) site is higher than the density designated for this parcel in the 2035 GP, thus, the land use shall be Residential Attached High based on the proposed density. Besides, the area of DeNova Homes should be 4.6 acres rather than 1.05 acres as documented in the 2023 HE Sites. The proposed future land use inventory by groundwater subbasin summarized in [Table 1](#) was developed from 2023 HE Opportunity Sites information provided by City staff, which is included in [Appendix A](#).

1.5 Proposed Project Phasing

Law

10631 (f) ...The urban water supplier shall include a detailed description of expected future water projects and programs...that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single dry water years and for a period of drought lasting five consecutive water years.. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

This Project consists of future residential developments to meet the increasing housing needs within the City. A large portion of this Project's proposed land uses (approximately 65.0%) locate on top of the Coyote Valley subarea, which is a part of the Santa Clara subbasin, and the rest is primarily above the Llagas subbasin.

The proposed future development of this Project was intentionally phased in order to adequately reflect the real-world construction process and estimate the demand more accurately. The 8-year development of this Project was phased in 5-year increments and the proposed developments were divided by different project sites and land use types.

It should be noted that the actual timing of construction for the proposed developments is subject to change, and might be different from this WSA. While the projected demands cover all construction work of the proposed developments, is anticipated to be completed within the 23-year planning horizon of this WSA.

2.0 PROJECTED WATER DEMANDS

Domestic water demand unit factors are coefficients commonly used in planning level analysis to estimate future average daily demands for areas with predetermined land uses. The unit factors are multiplied by the number of dwelling units or net acreages for residential categories, and by the net acreages for non-residential categories, to yield the average daily demand projections.

2.1 Water Use Demand Factors

There are several methods for developing the unit factors. The projected water demands in the currently adopted 2021 WSMP were based on land use demand factors. To ensure consistency with the City's Master Plans, in this assessment, the unit water demand factors are intentionally kept to be consistent with the City's WSMP. These demand factors account for the City's continued water conservation efforts and future water conservation targets implemented by the City. The water demand unit factors are documented in [Table 2](#).

Table 2 Average Day Water Demand Factors

Water Supply Assessment for 2023-2031 Housing Element Update
City of Morgan Hill

Land Use Category	Average Day Demand Factor(s)	Unit
Residential Estate	560	gpd/net acre
Residential Detached Low	1,050	gpd/net acre
Residential Detached Medium	1,700	gpd/net acre
Residential Detached High	2,140	gpd/net acre
Residential Attached Low	1,900	gpd/net acre
Residential Attached Medium	2,300	gpd/net acre
Residential Attached High	3,130	gpd/net acre
Mixed Use	1,350	gpd/net acre
Mixed Use Flex	1,390	gpd/net acre

2.2 Proposed Project Water Demand Projections

The development information provided by City staff identified the project site would develop as a combination of residential and mixed use land use types. It is assumed that the land use based on the received 2023 HE Sites will supersede the land use designations in 2035 GP. Additionally, the 2023 HE Sites will be used for estimating the effects on the water supply. The phased water demand projection results of this Project from initiation to the buildup are documented in [Table 3](#) and documented below.

The master plans used for preparing this WSA have different planning horizons, which are depicted in [Figure 3](#). It should be noted that the City will reach the buildup condition in the year 2038 in the 2021 WSMP, which was prepared based on the land use designation from 2035 GP, therefore the projected future demand after 2038 is anticipated to be consistent. For the purpose of this assessment, the future demands baseline is consistent with the 2020 UWMP, which was prepared based on the estimated population, to account for the City's potential growth after 2038.

- **Existing Demand** – From the City's 2021 WSMP, the existing total demand within the city limits is documented as 6,329,210 gallons per day (gpd, or approximately 7,094 Acre Feet per Year (AFY) ([Table 4](#)).
- **Future Water Demand – Santa Clara Subbasin (Coyote Subarea)**. The residential water demands of the proposed future development within the Coyote subarea at the end of the year 2031 are estimated at approximately 64.9 AFY for RDL, approximately 4.1 AFY for RDM, approximately 77.5 AFY for RAL, approximately 50.2 AFY for RAM. The water demand for the proposed future MU-F development within the Coyote subarea is estimated to be approximately 28.1 AFY. The total water demand of the Project's future Coyote subarea development is estimated at 224.8 AFY in the buildup of the 2023 HE Update.
- **Future Water Demand – Llagas Subbasin**. The residential water demands of the proposed future development within the Llagas subbasin at the end of the Year 2031 are estimated at 2.9 AFY for RE, approximately 18.8 AFY for RDM, approximately 8.0 AFY for RAL, approximately 41.7 AFY for RAM, and approximately 5.4 AFY for RAH. The non-residential water demands for the proposed future development within the Llagas subbasin are estimated to be 9.6 AFY for MU and approximately 44.3 AFY for MU-F. The total water demand of the Project's future Llagas subbasin development is estimated at 130.7 AFY in the buildup of the 2023 HE Update. [Table 4](#) identifies the net increase in demands, between the 2020 UWMP and this WSA, at 3 AFY. This net increase is resulting from a single proposed development, Monterey-First Community Housing (Magnolias, Map ID 14), which exceeded the previous general plan assumptions.
- **Future Water Demand – Other Developments**. The water demands from future developments that are not included in the 2023 HE Update are calculated based on the

total projected future water demands documented in the City's 2020 UWMP subtracting the estimated future demand from the Project. The computed results are summarized in [Table 4](#).

3.0 PROJECTED WATER SUPPLY

This section characterizes the intended water supply that will be used to serve the estimated water demands as detailed in [Section 2](#).

3.1 Groundwater Basin

Law

10631. (b)(4) *If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:*
(B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater.

The City is located above two subbasins, the Santa Clara subbasin of the Santa Clara Valley Groundwater Basin (Basin 2-009) and Llagas subbasin of the Gilroy - Hollister Groundwater Basin (Basin 3-003), and is depicted in [Figure 1](#). Both groundwater basins have been identified by DWR as "high" priority basins. The Santa Clara subbasin is delineated into two subareas, the Santa Clara Plain and Coyote Valley, by the Santa Clara Valley Water District, the Groundwater Sustainability Agency (GSA) of Santa Clara, and Llagas subbasins. A majority of the existing City limits are within the Llagas subbasin and the northwest part is located above the Coyote Valley subarea. The Santa Clara Valley Water District (Valley Water) has updated its 2021 GMP, which also satisfies the objectives of the Sustainable Groundwater Management Act (SGMA). Therefore, Valley Water's 2021 GMP serves as an alternative plan to the required Groundwater Sustainability Plan (GSP).

According to Valley Water's 2020 RUWMP, local groundwater resources make up the foundation of Santa Clara County's water supply. The groundwater is pumped from the subbasins by retail water suppliers, agricultural users, and private well owners to support municipal, industrial, agricultural, and domestic uses. Although most of the groundwater pumped is a result of Valley Water managed recharge programs, the subbasins are also recharged by the infiltration of rainfall and natural seepage through local creeks and streams. In addition, the groundwater subbasins serve as an extensive conveyance network, allowing water to move from the recharge areas to individual groundwater wells. The groundwater subbasins provide some natural filtration of surface water as it flows through the soil and rock. Unlike surface water, most groundwater in the county can be served by water retailers without additional treatment beyond disinfection. Lastly, the groundwater subbasins provide water storage, allowing water to be carried over from the wet season to the dry season and even from wet years to dry years.

Figure 3 Planning Horizons Comparison

Water Supply Assessment for 2023-2031 Housing Element Update
City of Morgan Hill



1. Source: City of Morgan Hill 2020 Urban Water Management Plan.
2. Source: City of Morgan Hill 2021 Water System Master Plan.
3. Source: Ongoing City of Morgan Hill 2023 - 2031 Housing Element Update, which is in process while preparing this Water Supply Assessment.

Table 3 Future Housing Development and Projected Water Demand

Water Supply Assessment for 2023-2031 Housing Element Update

City of Morgan Hill

Project Name	Map ID	Area (net acre)	Unit Factor (gpd/ac)	Phased Demand Projection				
				2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Santa Clara Subbasin (Coyote)								
Tilton-Lee Schmidt	13	0.78	1050	0.9				
Campoli-Squires	15	0.74	1700	1.4				
Sanchez-Brewer	15	0.24	1700	0.5				
Old Monterey - Appletree (Kelly Vo)	15	1.13	1700	2.2				
Monterey-Minor (Jemcor)	9	7.52	1900	16.0				
Monterey-City Ventures	7	6.69	1390		10.4			
Jarvis-MH Apartments (Braddock & Logan)	8	19.5	2300		50.2			
Cochrane - Toll Brothers	12	54.42	1050		64.0			
Half-Dividend (Crosswinds)	11	28.88	1900		61.5			
Monterey-Lucky Shing Manzinita Park	1	5.83	1390		9.1			
Monterey-Kerley (DeNova Homes)	10	4.6	1390		7.2			
No Project	10	0.9	1390		1.4			
Subtotal (Coyote)				20.9	195.2	8.6	0.0	0.0
Cumulative (Coyote)				20.9	216.1	224.7	224.7	224.7
Llagas Subbasin								
Monterey-First Community Housing (Magnolias)	14	1.54	3130	5.4				
Llagas-Strolata Properties (Silvas)	19	4.6	560	2.9				
Depot-Latala (Hale Lumber)	5	2.05	1350	3.1				
Monterey-Morgan Hill Senior Housing	17	1.89	1390	2.9				
Walnut Grove- Newland Homes (SiliconSage)	3	1.61	1700	3.1				
Dakota-Dunne	4	1.22	1700	2.3				
Diana- Mana Hanalei	4	3.65	1700	6.9				
Spring-Ginacola	16	2.78	1900	5.9				
Tenant-Osito Holdings	21	0.99	1900	2.1				
E. Dunne-Young (Andalusia)	2	2.33	2300	6.0				
Watsonville-Hordness (Crossings at Monterey/Royal Oaks Village)	20	8.19	1390		12.8			
Lillian Commons/Rosewood	22	9.48	1390		14.8			
Edes-Alcini (TTLG Morgan Hill)	18	1.1	1390		1.7			
Red Jasper	17	2.93	1390		4.6			
No Project	2	2.3	2300		5.9			
No Project	22	5.22	2300		13.4			
No Project	22	6.35	2300		16.4			
No Project	6	2.52	1350		3.8			
No Project	6	0.87	1350		1.3			
No Project	6	0.91	1350		1.4			
No Project	2	4.84	1390		7.5			
No Project	3	3.4	1700		6.5			
Subtotal (Llagas)				40.7	73.3	16.7	0.0	0.0
Cumulative (Llagas)				40.7	114.0	130.7	130.7	130.7
Total (City Wide)				61.6	268.5	25.3	0.0	0.0
Cumulative (City Wide)				61.6	330.1	355.4	355.4	355.4

2/24/2022

Note:

1. Proposed 2023-2031 housing elements information received from City staff on 1/7/2022.

Table 4 Comparison of Future Water Demand Projections

Water Supply Assessment for 2023-2031 Housing Element Update

City of Morgan Hill

	Projected Future Water Demand				
	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
2020 Urban Water Management Plan					
2020 UWMP¹	8,671	9,481	10,123	10,808	11,472
2021 Water System Master Plan²					
2021 WSMP^{3,4}	8,671	9,481	10,123	10,529	10,529
2022 Water Supply Assessment (This Report)					
Existing System⁵	7,094	7,094	7,094	7,094	7,094
Project consistent with GP	56.2	324.7	350.0	350.0	350.0
Project inconsistent with GP	5.4	5.4	5.4	5.4	5.4
Proposed Housing Elements	61.6	330.1	355.4	355.4	355.4
Other Future Developments⁶	1,518	2,060	2,677	3,362	4,026
Subtotal	8,674	9,484	10,126	10,811	11,475
Demand Increased from UWMP Projection	3.0	3.0	3.0	3.0	3.0

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Notes:

2/28/2022

1. Source: City of Morgan Hill 2020 Urban Water Management Plan, Table 4-3.
2. Future projected demands from 2021 WSMP are for information purpose only.
3. 2021 WSMP's buildout conditions was set as Year 2038. After Year 2038, the demands remain the same.
4. Source: City of Morgan Hill 2021 Water System Master Plan, Table 5.2.
5. Source: City of Morgan Hill 2021 Water System Master Plan, Table 5.2.
6. Demand for other developments = Future Demands (UWMP) - Existing Demand (WSMP) - Project Demands from 2023 HE Update (assuming all projects consistent with 2035 GP land use designation)

The Llagas subbasin and the Coyote Valley subarea are monitored and addressed by Valley Water. The January 2021 Groundwater Condition Report from Valley Water notes that groundwater levels were about the same as the 5-year average in the Coyote Valley subarea but about 13 feet lower than the 5-year average in the Llagas subbasin. Additionally, groundwater pumping for 2020 was above the 5-year average for both subbasins. However, groundwater recharging for 2020 was below the 5-year average for both subbasins.

3.2 Water Rights

Examples of legal factors that could impact the supply reliability of a water distribution system include pumping limitations in adjudicated groundwater basins and surface water contracts. Historically, groundwater has been the sole source of water supply within the City, and there are no new sources of supply currently planned. Groundwater is extracted from the Coyote Valley subarea of Santa Clara Valley Groundwater Basin and Llagas subbasin of the Gilroy-Hollister Groundwater Basin. These groundwater basins and subbasins are not adjudicated basins and no current legal factors are expected to limit the availability of supply.

According to the City's 2021 WSMP, sixteen groundwater wells serve as the domestic water source of supply. Based on the locations of the existing groundwater wells, it is assumed that currently the City is supplied by groundwater from both the Coyote subarea and Llagas subbasin.

3.3 Water Supply Reliability

Law

10631 (b) *Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision 10631(a).*

(4) *(Provide a) detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonable available, including, but not limited to, historic use records.*

There are two aspects of supply reliability to be considered. The first relates to immediate service needs and is primarily a function of the availability and adequacy of the supply facilities. This aspect is considered for emergency reliability. The second aspect is climate-related and involves the availability of water during mild or severe drought periods. Due to no non-potable water demand projected from the City's 2023 HE Update, only groundwater supply will be discussed in this WSA.

3.3.1 Groundwater Supply Facilities

The City currently uses local groundwater as its sole source of potable water supply. Water supply for the municipal water system is extracted from underground aquifers via sixteen existing groundwater wells located throughout the City.

The City's 2021 WSMP recommends the construction of six future groundwater wells to meet supply requirements as demand increases at the end of buildout (the year 2038). The City's storage facilities also enhance long-term reliability. These facilities provide emergency storage sufficient to handle the service area needs during power outages or other emergencies. Adding supply and distribution system enhancements will also add reliability through redundancy. This WSA assumes the supply facilities will be improved and constructed as recommended in the City's 2021 WSMP.

3.3.2 Subbasins Sustainable Yield

Law

10631 (b)(1) *A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.*

The 2021 GMP describes historical levels within the Santa Clara subbasin, which includes the Santa Clara Plain and Coyote Valley subareas, as generally consistent. Due to continuous groundwater monitoring and recharge in both subareas, groundwater levels have historically been consistent and shown a quick recovery after the 2012 - 2016 statewide drought. However, The January 2021 Groundwater Condition Report from Valley Water notes that the groundwater levels in Llagas subbasin were about 13 feet lower than the 5-year average in the Llagas subbasin. Additionally, groundwater levels in the Llagas subbasin and the Coyote Valley subarea are highly dependent on rainfall levels, which produce fluctuations in water levels during years of high or low rainfall. Inconsistent water levels due to drought have the potential to impact the supply available to the City.

SGMA defines the sustainable yield as the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. However, Valley Water does not rely on the estimated maximum water production value for long-term water supply planning due to the particular characteristics of the subbasins they are managing.

Instead of providing the sustainable yield of each subbasin, Valley Water implements both short-term and long-term groundwater managements to maintain sustainable conditions of subbasins, such as recommending short-term water use reduction in accordance with the Valley Water's Water Shortage Contingency Plan (WSCP), annual evaluations of groundwater storage and water supply risks, recharge of imported water and in-lieu recharge activities.

The total of natural groundwater recharge, local surface water, Valley Water Central Valley Project (CVP) deliveries, and recycled water supply excluding the wastewater treatment plant (WWTP)

utility water is regarded as the available supply for the consumers within the area. The projected future supply data of individual subbasins beneath the Project's proposed developments are provided by City staff and Valley Water staff, the results are summarized in [Table 5.A](#) and [5.B](#) and briefly described as follows:

- **Llagas Subbasin:** Approximately 36% of the proposed future housing development is located on top of the Llagas subbasin. The projected annual natural groundwater recharge to Llagas subbasin is approximately 22,478 AFY from 2025 to 2045, per modeling data provided by Valley Water staff. The available supplies of the Llagas subbasin are projected to be 47,319 AFY, 47,580 AFY, 48,373 AFY, 48,188 AFY, and 48,342 AFY in the year 2025, 2030, 2035, 2040, and 2045, which are summarized in [Table 5.A](#).
- **Coyote Valley Subarea:** On top of this subarea has approximately 127.68 acres of proposed future housing development. The projected available supply of the Coyote Valley subarea in the year 2025, 2030, 2035, 2040, and 2045 are approximately 12,465 AFY, 13,162 AFY, 13,764 AFY, 14,313 AFY, and 14,650 AFY, respectively, per modeling data provided by Valley Water staff, as documented in [Table 5.B](#).

4.0 SUPPLY SUFFICIENCY ANALYSIS

Law

10635 (a) *Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional or local agency population projections within the service area of the urban water supplier.*

Pursuant to California Water Code § 10910, the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies available during normal, single dry, and multiple dry water years during a 23-year projection will meet the projected water demand associated with the proposed Project.

In this section, a detailed analysis of the water supply and demand comparison will be provided to determine the groundwater supply sufficiency within the Project's proposed future developments, assuming the DeNova Homes project site is 4.6 acres and the rest of the Project develops as the 2023 HE Sites received from City staff.

Based on the data of the historical water use and supply data under different conditions prepared by Valley Water staff, and the City's 2020 UWMP prepared by Akel Engineering Group, the supply projections for the 2023 HE Update in this WSA were calculated by adding up the projected

available supplies within each subbasin (subarea) under different year types extracted from the South County Supply Document, as documented in [Tables 5.A, 5.B, 6.A, 6.B, 7.A, 7.B](#).

- **Normal Year:** The normal year is a year that represents the median runoff levels from precipitation, as well as the same general pattern of runoff. The supply quantities would be similar to historical average supplies. Within the Llagas subarea, the projected available supply is estimated at 47,319 AFY, 47,580 AFY, 48,373 AFY, 48,188 AFY, and 48,342 AFY in the year 2025, 2030, 2035, 2040, and 2045. The projected total water demand of the Project is estimated as 131 AFY, which is accounted for a projected subbasin-wide demand of 47,372 AFY, in 2045 under normal year conditions, which are documented in [Table 5.A](#). Within the Llagas subbasin, the available water supply is expected to be able to meet the projected future water demand during normal years. Similarly, in the Coyote Valley subarea, the available water supplies are estimated as 12,465 AFY, 13,162 AFY, 13,764 AFY, 14,313 AFY, and 14,650 AFY, for every five years from 2025 to 2045. The projected water demand of the Project and subarea-wide demand are estimated as 225 AFY and 13,025 AFY, respectively, as documented in [Table 5.B](#). From the results, the subarea's future demand could be satisfied by the subarea-wide available supply during normal years.
- **Single-Dry Year:** The single dry year is defined as the individual year with the lowest usable water supply and slightly higher water demands. From the City's 2020 UWMP, 1977 is the single dry year used for analysis. Within the Llagas subbasin, the projected available supply is estimated at 36,424 AFY, the projected water demand of the Project is estimated as 131 AFY, which is accounted for a total demand of 47,372 AFY, in 2045 under single dry year conditions, which are documented in [Table 6.A](#). Similarly, for the Coyote Valley subarea, the available water supply, water demand of the Project, and total projected demand in the year 2045 are estimated as 14,442 AFY, 225 AFY, and 13,025 AFY, respectively, as documented in [Table 6.B](#). For both subbasins, due to potential water supply reductions, the projected water demand may exceed the available supply amount for some single dry years during the planning period.

Pursuant to Valley Water's 2020 RUWMP, Valley Water would store excess wet year supplies and draw on these reserve supplies during the dry year(s). And in the City's 2020 UWMP, water shortage levels shall be declared based on the water supply conditions ([Appendix B](#)) and implement water usage reduction actions pursuant to the Water Shortage Contingency Plan ([Appendix C](#)) to promote water conservation. In this way, the limited water supply may be sufficient to meet the reduced water demand.

- **Multiple Dry Years:** Similar to single-dry year, multiple dry years is defined as the five consecutive years with the lowest usable water supply and slightly higher water demands, which are documented as the year 1988, 1989, 1990, 1991, 1992 in the City's 2020 UWMP. The projected water supply and demands are summarized in [Table 7.A](#) and [Table 7.B](#).

Table 5.A Normal Year Supply and Demand Comparison (Llagas Subbasin)
Water Supply Assessment for 2023-2031 Housing Element Update
City of Morgan Hill

	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Projected Water Supply of the Llagas Subbasin¹					
Natural Groundwater Recharge	22,478	22,478	22,478	22,478	22,478
Local Surface Water	10,251	13,408	14,597	14,832	15,199
Valley Water CVP Deliveries	12,918	9,626	8,834	8,415	8,201
Recycled Water Supply ²	1,673	2,069	2,464	2,464	2,464
Recycled Water ^{2,3} (WWTP Utility Water)	1,224	1,228	1,232	1,232	1,232
Total Supplies without WWTP Utility Water	47,319	47,580	48,373	48,188	48,342
Total Supplies with WWTP Utility Water	48,543	48,808	49,605	49,420	49,574
Projected Average Annual Water Demand					
City of Gilroy ⁴	8,646	9,314	10,034	10,809	11,645
City of Morgan Hill (domestic) ^{5,7}	6,301 (+3)	6,890 (+3)	7,357 (+3)	7,855 (+3)	8,337 (+3)
Other Users ⁶	32,016	30,671	29,951	28,531	27,387
Total Demands	46,966	46,878	47,345	47,198	47,372
Supply vs Demand Comparison					
Difference (Supply - Demand)⁷	353 (-3)	702 (-3)	1028 (-3)	99 (-3)	970 (-3)
Percent of Total Supply⁷	99% (+0.001%)	99% (+0.001%)	98% (+0.001%)	98% (+0.001%)	98% (+0.001%)

Notes:

1. Projected supply per South County Supply document received from SCVWD staff August 5, 2021.
2. Source: 2015 South County Recycled Water Master Plan Update, Table 3-10.
3. Recycled water use internally at WWTP facility is not considered as a reportable supply/demand of recycled water. Therefore, it was excluded from Supply vs Demand Comparison.
4. Demand consistent with City of Gilroy draft 2020 UWMP.
5. City of Morgan Hill demand excludes Butterfield well and Boys Ranch wells, which are located in the Coyote Valley subarea.
6. Demand for other users calculated from documents received from SCVWD staff August 5, 2021.
7. Values in parentheses represent the estimated impact from the proposed Magnolias development (2023-2031 HE Update), compared to the 2020 UWMP.

Table 5.B Normal Year Supply and Demand Comparison (Coyote Subarea)
 Water Supply Assessment for 2023-2031 Housing Element Update
 City of Morgan Hill

	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Projected Water Supply of the Coyote Valley Subarea¹					
Natural Groundwater Recharge	2,301	2,304	2,304	2,304	2,304
Local Surface Water	5,167	6,481	6,495	6,503	6,494
Valley Water CVP Deliveries	4,996	4,377	4,965	5,506	5,852
Total Supplies	12,465	13,162	13,764	14,313	14,650
Projected Average Annual Water Demand					
City of Morgan Hill (domestic) ²	2,370	2,591	2,767	2,954	3,136
Other Users ³	8,752	8,872	9,340	9,724	9,889
Total Demands	11,122	11,463	12,107	12,678	13,025
Supply vs Demand Comparison					
Difference (Supply - Demand)	1,343	1,699	1,657	1,635	1,625
Percent of Total Supply	89%	87%	88%	89%	89%

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Notes:

1. Projected supply per South County Supply document received from SCVWD staff August 5, 2021.
2. City of Morgan Hill demand includes pumping from Butterfield well and Boys Ranch wells, which are located in the Coyote Valley subarea.
3. Demand for other users calculated from documents received from SCVWD staff August 5, 2021.

Table 6.A Single Dry Year Supply and Demand Comparison (Llagas Subbasin)
Water Supply Assessment for 2023-2031 Housing Element Update
City of Morgan Hill

	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Projected Water Supply of the Llagas Subbasin¹					
Natural Groundwater Recharge	18,550	18,550	18,550	18,550	18,550
Local Surface Water	1,766	5,612	5,616	5,616	5,615
Valley Water CVP Deliveries	11,077	10,434	10,430	10,414	9,796
Recycled Water Supply ²	1,673	2,069	2,464	2,464	2,464
Recycled Water ^{2,3} (WWTP Utility Water)	1,224	1,228	1,232	1,232	1,232
Total Supplies without WWTP Utility Water	33,066	36,665	37,060	37,044	36,424
Total Supplies with WWTP Utility Water	34,290	37,893	38,292	38,276	37,656
Projected Average Annual Water Demand					
City of Gilroy ⁴	8,646	9,314	10,034	10,809	11,645
City of Morgan Hill (domestic) ⁵	6,304	6,893	7,360	7,858	8,340
City of Morgan Hill (domestic) ^{5,7}	6,301 (+3)	6,890 (+3)	7,357 (+3)	7,855 (+3)	8,337 (+3)
Other Users ⁶	32,016	30,671	29,951	28,531	27,387
Total Demands	46,966	46,878	47,345	47,198	47,372
Supply vs Demand Comparison^{3,7}					
Difference (Supply - Demand)	-13,900 (-3)	-12,213 (+3)	-10,285 (-3)	-10,154 (-3)	-10,948 (-3)
Percent of Total Supply	142% (+0.009%)	128% (+0.008%)	128% (+0.008%)	127% (+0.011%)	130% (+0.008%)
Recommend WSCP Actions					
Water Shortage Level	Level 3				
WSCP - use reduction saving benefit	14,090	14,063	14,204	14,159	14,212
Revised Demand	32,876	32,815	33,142	33,039	33,160
Difference (Supply - Demand)	189	3,850	3,918	4,005	3,264
Percent of Total Supply	99%	89%	89%	89%	91%

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Notes:

1. Projected supply per South County Supply document received from SCVWD staff August 5, 2021.
2. Source: 2015 South County Recycled Water Master Plan Update, Table 3-10.
3. Recycled water use internally at WWTP facility is not considered as a reportable supply/demand of recycled water. Therefore, it was excluded from Supply vs Demand Comparison.
4. Demand consistent with City of Gilroy draft 2020 UWMP.
5. City of Morgan Hill demand excludes Butterfield well and Boys Ranch wells, which are located in the Coyote Valley subarea.
6. Demand for other users calculated from documents received from SCVWD staff August 5, 2021.
7. Values in parentheses represent the estimated impact from the proposed Magnolias development (2023-2031 HE Update), compared to the 2020 UWMP.

Table 6.B Single Dry Year Supply and Demand Comparison (Coyote Subarea)
 Water Supply Assessment for 2023-2031 Housing Element Update
 City of Morgan Hill

	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Projected Water Supply of the Coyote Valley Subarea¹					
Natural Groundwater Recharge	1,383	1,442	1,442	1,442	1,442
Local Surface Water	6,516	6,516	6,516	6,516	6,516
Valley Water CVP Deliveries	827	5,530	5,805	6,484	6,484
Total Supplies	8,726	13,487	13,762	14,442	14,442
City of Morgan Hill (domestic) ²	2,370	2,591	2,767	2,954	3,136
Other Users ³	8,752	8,872	9,340	9,724	9,889
Total Demands	11,122	11,463	12,107	12,678	13,025
Supply vs Demand Comparison					
Difference (Supply - Demand)	-2,396	2,024	1,655	1,764	1,417
Percent of Total Supply	127%	85%	88%	88%	90%
Recommend WSCP Actions					
Water Shortage Level	Level 3				
WSCP - use reduction saving benefit	3,337				
Revised Demand	7,785				
Difference (Supply - Demand)	941				
Percent of Total Supply	89%				

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Notes:

1. Projected supply per South County Supply document received from SCVWD staff August 5, 2021.
2. City of Morgan Hill demand includes pumping from Butterfield well and Boys Ranch wells, which are located in the Coyote Valley subarea.

Table 7.A Multiple Dry Year Supply and Demand Comparison (Llagas Subbasin)
 Water Supply Assessment for 2023-2031 Housing Element Update
 City of Morgan Hill

	2025					2030					2035					2040					2045				
	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)
Projected Water Supply of the Llagas Subbasin¹																									
Natural Groundwater Recharge	19,535	18,409	20,238	21,832	22,221	19,535	18,409	20,238	21,832	22,221	19,535	18,409	20,238	21,832	22,221	19,535	18,409	20,238	21,832	22,221	19,535	18,409	20,238	21,832	22,221
Local Surface Water	4,721	7,344	7,623	13,549	15,122	8,152	7,344	7,957	16,640	18,294	9,069	8,267	7,623	16,306	18,298	9,069	8,267	7,623	17,144	19,130	9,069	8,266	7,623	17,144	19,130
Valley Water CVP Deliveries	11,448	11,448	10,827	10,139	8,120	9,492	9,492	12,079	6,233	7,574	9,029	9,029	11,800	6,954	6,935	9,277	9,277	11,719	6,160	4,872	8,860	8,860	11,211	5,020	4,092
Recycled Water Supply ²	1,673	1,673	1,673	1,673	1,673	2,069	2,069	2,069	2,069	2,069	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464	2,464
Recycled Water ^{2,3} (WWTP Utility Water)	1,224	1,224	1,224	1,224	1,224	1,228	1,228	1,228	1,228	1,228	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232
Total Supplies without WWTP Utility Water	37,377	38,874	40,361	47,193	47,136	39,248	37,314	42,343	46,774	50,158	40,097	38,170	42,125	47,557	49,918	40,344	38,417	42,044	47,600	48,687	39,928	37,999	41,536	46,460	47,907
Total Supplies with WWTP Utility Water	38,601	40,098	41,585	48,417	48,360	40,476	38,542	43,571	48,002	51,386	41,329	39,402	43,357	48,789	51,150	41,576	39,649	43,276	48,832	49,919	41,160	39,231	42,768	47,692	49,139
Projected Average Annual Water Demand																									
City of Gilroy ⁴	8,646	8,646	8,646	8,646	8,646	9,314	9,314	9,314	9,314	9,314	10,034	10,034	10,034	10,034	10,034	10,809	10,809	10,809	10,809	10,809	11,645	11,645	11,645	11,645	11,645
City of Morgan Hill (domestic) ^{5,7}	6,301 (+3)	6,890 (+3)	6,890 (+3)	6,890 (+3)	6,890 (+3)	6,890 (+3)	7,357 (+3)	7,357 (+3)	7,357 (+3)	7,357 (+3)	7,357 (+3)	7,855 (+3)	7,855 (+3)	7,855 (+3)	7,855 (+3)	7,855 (+3)	8,337 (+3)	8,337 (+3)	8,337 (+3)	8,337 (+3)	8,337 (+3)				
Other Users ⁶	32,016	32,016	32,016	32,016	32,016	30,671	30,671	30,671	30,671	30,671	29,951	29,951	29,951	29,951	29,951	28,531	28,531	28,531	28,531	28,531	27,387	27,387	27,387	27,387	27,387
Total Demands	46,966	46,966	46,966	46,966	46,966	46,878	46,878	46,878	46,878	46,878	47,345	47,345	47,345	47,345	47,345	47,198	47,198	47,198	47,198	47,198	47,372	47,372	47,372	47,372	47,372
Supply vs Demand Comparison																									
Difference (Supply - Demand)	-9589 (-3)	-8092 (-3)	-6604 (-3)	227 (-3)	169 (-3)	-7630 (-3)	-9564 (-3)	-4534 (-3)	-103 (-3)	3280 (-3)	-7247 (-3)	-9174 (-3)	-5220 (-3)	211 (-3)	2572 (-3)	-6853 (-3)	-8780 (-3)	-5154 (-3)	402 (-3)	1489 (-3)	-7444 (-3)	-9372 (-3)	-5835 (-3)	-911 (-3)	535 (-3)
Percent of Total Supply	126% (+0.008%)	121% (+0.008%)	116% (+0.007%)	100% (+0.006%)	100% (+0.006%)	119 (+0.008%)	126% (+0.008%)	111% (+0.007%)	100% (+0.006%)	93% (+0.006%)	118% (+0.007%)	124% (+0.008%)	112% (+0.007%)	100% (+0.006%)	95% (+0.006%)	117% (+0.007%)	123% (+0.008%)	112% (+0.007%)	99% (+0.006%)	97% (+0.006%)	119% (+0.008%)	125% (+0.008%)	114% (+0.007%)	102% (+0.006%)	99% (+0.006%)
Recommend WSCP Actions																									
Water Shortage Level	Level 3	Level 2	Level 2			Level 2	Level 3	Level 1	Level 1		Level 2	Level 2	Level 2			Level 2	Level 2	Level 2	Level 2		Level 2	Level 2	Level 2	Level 1	
WSCP - use reduction saving benefit	14,090	9,393	9,393			9,376	14,063	4,688	4,688		9,469	9,469	9,469			9,440	9,440	9,440	9,440		9,474	9,474	9,474	4,737	
Revised Demand	32,876	37,573	37,573			37,502	32,815	42,190	42,190		37,876	37,876	37,876			37,758	37,758	37,758	37,758		37,898	37,898	37,898	42,635	
Difference (Supply - Demand)	4,501	1,301	2,789			1,745	4,499	153	4,584		2,221	294	4,249			2,586	659	4,285			2,030	102	3,639	3,826	
Percent of Total Supply	88%	97%	93%			96%	88%	100%	90%		94%	99%	90%			94%	98%	90%			95%	100%	91%	92%	

Notes:
 1. Projected supply per South County Supply document received from SCVWD staff August 5, 2021.
 2. Source: 2015 South County Recycled Water Master Plan Update, Table 3-10.
 3. Recycled water use internally at WWTP facility is not considered as a reportable supply/demand of recycled water. Therefore, it was excluded from Supply vs Demand Comparison.
 4. Demand consistent with City of Gilroy draft 2020 UWMP.
 5. City of Morgan Hill demand excludes Butterfield well and Boys Ranch wells, which are located in the Coyote Valley subarea.
 6. Demand for other users calculated from documents received from SCVWD staff August 5, 2021.
 7. Values in parentheses represent the estimated impact from the proposed Magnolias development (2023-2031 HE Update), compared to the 2020 UWMP

Table 7.B Multiple Dry Year Supply and Demand Comparison (Coyote Subarea)

Water Supply Assessment for 2023-2031 Housing Element Update
City of Morgan Hill

	2025					2030					2035					2040					2045					
	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	1st (AFY)	2nd (AFY)	3rd (AFY)	4th (AFY)	5th (AFY)	
Projected Water Supply of the Coyote Valley Subarea¹																										
Natural Groundwater Recharge	1,529	1,301	1,659	2,505	3,107	1,529	1,301	1,659	2,505	3,147	1,529	1,301	1,659	2,505	3,147	1,529	1,301	1,659	2,505	3,147	1,529	1,301	1,659	2,505	3,147	
Local Surface Water	5,835	5,139	5,840	5,028	5,056	6,239	5,445	5,864	5,234	6,516	6,516	6,248	5,383	5,971	6,516	6,516	6,516	6,516	5,325	6,516	6,516	6,516	6,516	5,162	5,778	6,516
Valley Water CVP Deliveries	1,932	886	1,268	1,960	2,580	4,029	4,614	6,258	5,589	4,757	4,874	4,106	3,046	8,650	5,956	4,933	4,344	3,229	8,721	6,419	4,971	4,338	3,211	5,280	7,122	
Total Supplies	9,296	7,326	8,766	9,493	10,743	11,797	11,359	13,780	13,327	14,420	12,919	11,654	10,088	17,127	15,619	12,978	12,161	10,213	17,742	16,082	13,016	12,155	10,032	13,563	16,785	
Projected Average Annual Water Demand																										
City of Morgan Hill (domestic) ²	2,030	2,030	2,030	2,030	2,030	2,591	2,591	2,591	2,591	2,591	2,767	2,767	2,767	2,767	2,767	2,954	2,954	2,954	2,954	2,954	3,136	3,136	3,136	3,136	3,136	
Other Users ³	9,092	9,092	9,092	9,092	9,092	8,872	8,872	8,872	8,872	8,872	9,340	9,340	9,340	9,340	9,340	9,724	9,724	9,724	9,724	9,724	9,889	9,889	9,889	9,889	9,889	
Total Demands	11,122	11,122	11,122	11,122	11,122	11,463	11,463	11,463	11,463	11,463	12,107	12,107	12,107	12,107	12,107	12,678	12,678	12,678	12,678	12,678	13,025	13,025	13,025	13,025	13,025	
Supply vs Demand Comparison																										
Difference (Supply - Demand)	-1,826	-3,796	-2,356	-1,629	-379	334	-104	2,317	1,864	2,957	812	-453	-2,019	5,020	3,512	300	-517	-2,465	5,064	3,404	-9	-870	-2,993	538	3,760	
Percent of Total Supply	120%	152%	127%	117%	104%	97%	101%	83%	86%	79%	94%	104%	120%	71%	78%	98%	104%	124%	71%	79%	100%	107%	130%	96%	78%	
Planned WSCP Actions																										
Water Shortage Level	Level 2	Level 4	Level 3	Level 2	Level 1	Level 1																				
WSCP - use reduction saving benefit	2,224	4,449	3,337	2,224	1,112	1,146					1,211					1,268					1,303					
Revised Demand	8,898	6,673	7,785	8,898	10,010	10,317					10,896					11,410					11,723					
Difference (Supply - Demand)	399	653	981	596	733	1,042					758					750					1,293					
Percent of Total Supply	96%	91%	89%	94%	93%	91%					93%					94%					90%					

Notes:

1. Projected supply per South County Supply document received from SCVWD staff August 5, 2021.

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2. Engineering Group, Inc.

3. Engineering Group, Inc.

Generally, the supply system is observed to be sufficient to meet the demand requirement in some dry years in prolonged droughts. But it might be not able to satisfy the demand all cycle long. However, with the Water Shortage Contingency Plan taking effect, and the waste and unreasonable use of water being prevented, the available water supply may meet the reduced water demand during droughts.

Comparing the projected water supply availability and water demands, this water supply assessment indicates that the water supply from the subbasins is sufficient to meet the water demands of the proposed future developments within the City limits, under normal year conditions, over the next 23 years. However, in a single dry year or consecutive dry years, the projected demand is expected to exceed the system supply. Therefore, water conservation actions and procedures, such as declaring drought and calling for short-term water use reductions, are necessary for maximizing the use of available supplies in order to meet the potential shortage, more details are discussed in the City's 2021 WSCP.

It should be noted that this supply shortage during single dry and consecutive dry years was condition present in the 2020 UWMP, and not caused by this Project.

5.0 SUMMARY AND CONCLUSIONS

The land use projections in this report were based on the information contained in the City's 2023 HE Sites ([Appendix A](#)). They were consistent with the City's 2035 GP (except for proposed development No. 14), and phased in 5-year increments and through the project horizon year of 2045, with the very valuable assistance of City of Morgan Hill staff. A summary of the findings include:

5.1 Land Use

The proposed future development within the SOI of the City of Morgan Hill consists of approximately 4.6 acres (4 units) of Residential Estate, approximately 55.2 acres (139 units) of Residential Detached Low, approximately 12.0 acres (63 units) of Residential Detached Medium, approximately 40.2 acres (556 units) of Residential Attached Low, approximately 35.7 acres (655 units) of Residential Attached Medium, approximately 1.54 acres (66 units) of Residential Attached High, approximately 6.4 acres (117 units) of Mixed Use, and approximately 42.9 acres (750 units) of Mixed Use Flex.

5.2 Water Demands

According to the City's 2023 HE Update (being prepared during this WSA), the proposed housing development is expected to be constructed by the end of year 2031. Therefore, the projected demand from this Project shall be consistent from year 2031 to the planning horizon of this WSA, which is year 2045. At the end of the 23-year period, the projected water demands from this

Project within the Coyote Valley subarea and Llagas subbasin are estimated at approximately 225 AFY and 131 AFY, respectively, and the total demand is estimated to be approximately 356 AFY.

Table 3 provides a detailed listing of anticipated projects, within each groundwater basin, with phased demand projections. **Table 4** provides a summary of the projected phased demands, and a comparison between this WSA, the 2020 Urban Water Management Plan (UWMP), and the 2021 Water System Master Plan. It should be noted that **Table 4** identifies the net increase in demands, between the 2020 UWMP and this WSA, at 3 AFY. This net increase is resulting from a single proposed development, Monterey-First Community Housing (Magnolias, Map ID 14), which exceeded the previous general plan assumptions.

5.3 Water Supply

Based on the Valley Water 2020 UWMP and the South County Supply projections provided by City staff and Valley Water staff, the total water supply within each subbasin consists of natural groundwater recharge, local surface water, Valley Water CVP deliveries, recycled water supply (excluding WWTP utility water), where available. Therefore, in the year 2045, under normal year conditions, the projected water supply availabilities of the Llagas subbasin and Coyote Valley subarea are approximately 48,342 AFY and 14,650 AFY, respectively (**Tables 5.A** and **5.B**).

5.4 Water Supply Sufficiency

Water supply sufficiency is compared during normal years, as well as during dry years.

Normal Year. Comparing the projected water supply availability and water demands, this water supply assessment indicates that the water supply from the subbasins is sufficient to meet the water demands of the proposed future developments within the City limits, under normal year conditions, over the next 23 years (**Tables 5.A, 5.B**).

Dry Years. During a single dry year or consecutive dry years, the projected demands are expected to exceed the system supply in the 25-year window (**Tables 6.A, 6.B, 7.A, 7.B**). Therefore, pursuant to the City's 2020 UWMP and WSCP, water conservation actions (**Appendix C**) and procedures, such as declaring water shortage levels (**Appendix B**) and calling for short-term water use reductions, are necessary for maximizing the use of available supplies in order to meet the potential shortage. It should be noted that this supply shortage during single dry and consecutive dry years was condition present in the 2020 UWMP, and not caused by this Project.

5.5 Conclusions

In conclusion, the analysis and findings in this WSA indicate the following:

- The net increase in demands, between the 2020 UWMP and this WSA, is at 3 AFY.

- The water supply from the subbasins is sufficient to meet the water demands of the proposed future developments within the City limits, under normal year conditions, over the next 23 years.
- This supply shortage during single dry and consecutive dry years was condition present in the 2020 UWMP, and not caused by this Project.

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City of Morgan Hill

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Appendices

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Appendix A

Final Morgan Hill HE Opportunity Sites

Map ID	Project Name	Project No.	APN	Location	Acres	Units	Entitlement Status	GP Density Consistency	Flood Zone	Mapped Flood Zone GP
1	Monterey-Lucky Shing Manzinita Park	SR2020-0017	72501018	MONTEREY RD	5.83	67	PENDING, expect to be entitled prior to HE update and EIR	C		
2	E. Dunne-Young (Andalusia)	SR2018-0020	72602052 and 72602051		2.33	46	Entitled	C		
2	No Project	n/a	72602012		4.84	76	No Project	C		
2	No Project	n/a	72602016		2.3	36	No Project	C		
3		n/a	72607021	17364 Walnut Grove Dr	3.4	13	No Project	C		
3	Walnut Grove- Newland Homes (SiliconSage)	SR2020-0025	72607090 (-91 through -98)	Walnut Grove Dr.	1.61	11	Entitled	C		
4	Dakota-Dunne	SR2021-0003	72609024		1.22	6	Entitled	C		
4	Diana- Mana Hanalei,	SR2019-0028	72609078 through -101		3.65	24	Entitled	C		
5	Depot-Latala (Hale Lumber)	SR2019-0003/SD2018-007/EA2019-0013	72613049	17020 DEPOT ST	2.05	49	Entitled	C	Y	Y
6	No Project	n/a	72623018	95 E MAIN AV	2.52	40	No Project	C	Y	Y
6	No Project	n/a	72623019	MCLAUGHLIN AV	0.87	14	No Project	C	Y	Y
6	No Project	n/a	72623020	MONTEREY RD	0.91	14	No Project	C	Y	Y
7	Monterey-City Ventures	SR2019-0026	72625006	18110 MONTEREY RD	6.69	101	Entitled	C	Y*	N
8	Jarvis-MH Apartments (Braddock & Logan),	SR2019-0015	72625095		19.5	389	Entitled	C	Y	Y
9	Monterey-Minor (Jemcor)	SR2020-0027	72636059	18960 Monterey Rd	7.52	249	Entitled	C		
10	No Project		72641065		0.9	14	No Project	C		
10	Monterey-Kerley (DeNova Homes)	PRE2021-0001	72642002, -3	19380 Monterey Rd	1.05	93	PENDING, expect to be entitled prior to HE update and EIR	C		
11	Half-Dividend (Crosswinds)	SR2020-0010	72830001, -2, -3, and -4	Half Road and Mission'	28.88	269	PENDING, expect to be entitled prior to HE update and EIR	C		
12	Cochrane - Toll Brothers	SR2021-0011/EA2021-0009	72834032 and 72834033		54.42	137	PENDING, expect to be entitled prior to HE update and EIR	C		
13	Tilton-Lee Schmidt	SR2018-0009	76409004	280 TILTON AV	0.78	2	Entitled	C		
14	Monterey-First Community Housing (Magnolias)	SR2021-0005	76412006	17965 Monterey Rd	1.54	66	Entitled	N	Y	Y
15	Campoli-Squires	SD2021-0002	76424005	185 CAMPOLI DR	0.74	1	Entitled	C		
15	Sanchez-Brewer	SD2020-0001	76424076	185 SANCHEZ DR	0.24	1	Entitled	C		
15	D MONTEREY - APPLETREE (KELLY)	AAE2021-0002	76424061	18755 Monterey Rd	1.13	7	Entitled	C		
16	Spring-Ginacola	SR2020-0028	76711030	335 Spring Rd	2.78	22	Entitled	C		
17	Red Jasper	16595 MONTEREY RD	76717046		2.93	103	Potential Project	C	Y	Y
18	Edes-Alcini (TTLC Morgan Hill),	PRE2021-0002	76718046	MONTEREY RD	1.1	21	PROPOSED, NOT expected to be entitled prior to HE update or EIR	C	Y	Y
19	Llagas-Strolata Properties (Silvas)	SR2018-0025	77332013	1110 Llagas Rd	4.6	4	Entitled	C		
20	Watsonville-Hordness (Crossings at Monterey/Royal Oaks Village)	SR2020-0023	77904075	15440 Monterey Rd	8.19	73	Entitled	C	Y*	N
17	Monterey-Morgan Hill Senior Housir	SR2020-0005	81702067	16685 Church St	1.89	82	Entitled	C	Y	Y
21	Tenant-Osito Holdings	SR2020-0014	81704059	215 TENNANT AV	0.99	16	Entitled	C		
22	No Project	n/a	81709036	Juan Hernandez Dr	5.22	83	No Project	C		
22	Lillian Commons/Rosewood	PA2019-0005 & ZA2019-00	81709041		9.48	120	Entitled	C		
22	No Project		81709055	Tenant Avenue	6.35	101	No Project	C		

Total Acres/Units: 198.45 2350

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Appendix B

Water Shortage Levels

(City of Morgan Hill 2020 UWMP, Table 8-2)

Table 8-2 Water Shortage Contingency Plan Levels

Shortage Level	Percent Supply Shortage/ Reduction	Morgan Hill Shortage Level	Valley Water Shortage Level Title	Water Supply Condition
Level 0	None	Normal	<i>Normal</i>	At Level 0, no Water Supply Shortage condition exists.
Level 1	Up to 10%	Alert	<i>Alert</i>	A Level 1 Water Supply Shortage condition exists when City Council determines and agrees that 1% - 10% consumer demand reduction is necessary to make more efficient use of water.
Level 2	11 to 20%	Significant	<i>Severe</i>	A Level 2 Water Supply Shortage condition exists when City Council determines and agrees that 11% - 20% consumer demand reduction is necessary to make more efficient use of water.
Level 3	21 to 30%	Severe	<i>Critical</i>	A Level 3 Water Supply Shortage condition exists when City Council determines and agrees that 21% - 30% consumer demand reduction is necessary to make more efficient use of water.
Level 4	31 to 40%	Critical	<i>Critical</i>	A Level 4 Water Supply Shortage condition exists when City Council determines and agrees that 31% - 40% consumer demand reduction is necessary to make more efficient use of water.
Level 5	41 to 50%	Crisis	<i>Emergency</i>	A Level 5 Water Supply Shortage condition exists when City Council determines and agrees that 41% - 50% consumer demand reduction is necessary to make more efficient use of water.
Level 6	> 50%	Emergency	<i>Emergency</i>	A Level 6 Water Supply Shortage condition exists when City Council determines and agrees that a consumer demand reduction of greater than 50% is necessary to maintain public water supplies.

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Appendix C

Water Shortage Response Actions

(City of Morgan Hill 2020 WSCP, Table 5-1)

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 0 (Year-Round)	Landscape - Limit landscape irrigation to specific times	<p>Prohibits watering or irrigating lawn, landscape, or other vegetated area 9:00 a.m. and 5:00 p.m. with the following exceptions:</p> <ul style="list-style-type: none"> - Using a hand-held bucket or similar container - Using a hand-held hose equipped with a positive self-closing water shut-off nozzle or device - For very short periods of time for the express purpose of adjusting or repairing an irrigation system 	Yes
Level 0 (Year-Round)	Landscape - Limit landscape irrigation to specific times	<p>Prohibits watering or irrigating of lawn, landscape, or other vegetated area using a system or device that is left unattended for more than fifteen (15) minutes per day per station. Exceptions include low-flow drip systems where no emitter produces flow more than two (2) gallons per hour, and weather based controllers or stream rotor sprinklers with 70% efficiency standard.</p>	Yes
Level 0 (Year-Round)	Landscape - Restrict or prohibit runoff from landscape irrigation	<p>Prohibits watering or irrigating of lawn, landscape, or other vegetated area that causes or allows excessive flow or runoff onto sidewalk, driveway, street, etc.</p>	Yes
Level 0 (Year-Round)	Other - Prohibit use of potable water for washing hard surfaces	<p>No washing down hard or paved surfaces except with the use of hand-held water container, hand-held hose with a positive self-closing water shut-off device, low-volume high-pressure cleaning machine equipped to recycle any water used, or low-volume high-pressure water broom.</p>	Yes
Level 0 (Year-Round)	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	<p>Requires repairs to be made to breaks, leaks, or other malfunctions no more than ten (10) days upon receiving written notice from the City.</p>	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 0 (Year-Round)	Water Features - Restrict water use for decorative water features, such as fountains	Prohibits operation of a water fountain or decorative water features that does not use recirculated water.	Yes
Level 0 (Year-Round)	Other	Prohibits using water to wash a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not except by the use of a hand-held water container or hand-held hose with a positive self-closing water shut-off device. This does not apply to any commercial car washing facility.	Yes
Level 0 (Year-Round)	CII - Restaurants may only serve water upon request		Yes
Level 0 (Year-Round)	CII - Lodging establishment must offer opt out of linen service	Requires hotels, motels, and other commercial lodging established to provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments must prominently display notice of this option in each bathroom using clear and easily understood language.	Yes
Level 0 (Year-Round)	CII - Other CII restriction or prohibition	Prohibits installation of a single pass cooling system for buildings requesting new water service.	Yes
Level 0 (Year-Round)	CII - Other CII restriction or prohibition	Prohibits installation of non-recirculating water systems in new commercial conveyor car wash and new commercial laundry systems.	Yes
Level 0 (Year-Round)	CII - Commercial kitchens required to use pre-rinse spray valves	Prohibits the use of non-water conserving dishwasher spray valves in food preparation establishments, such as restaurants or cafes.	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 0 (Year-Round)	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	All commercial conveyor car wash systems must have installed recirculating water systems, or secured a waiver of this requirement from the City.	Yes
Level 0 (Year-Round)	Landscape - Limit landscape irrigation to specific days	Limits watering or irrigating of lawn, landscape or other vegetated area to three days per week during the months of March through October. Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than one day per week during the months of November through February. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
Level 1	Expand Public Information Campaign	Communication campaign asking community to conserve water use.	Yes
Level 2	Expand Public Information Campaign	Targeted communications relating to leaks and high water users.	Yes
Level 3	Landscape - Limit landscape irrigation to specific days	Active enforcement of limiting watering or irrigating of lawn, landscape or other vegetated area to 3 times per week during March to October.	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Prohibits using water to wash a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not except at a commercial car washing facility that utilizes a recirculating water system to capture or reuse water.	Yes
Level 3	Implement or Modify Drought Rate Structure or Surcharge	Imposition of alternative "drought" rate schedule if City adopts such a schedule.	Yes
Level 4	Landscape - Limit landscape irrigation to specific days	Active enforcement of limiting watering or irrigating of lawn, landscape or other vegetated area to 2 times per week during March to October.	Yes
Level 5	Landscape - Limit landscape irrigation to specific days	Active enforcement of limiting watering or irrigating of trees and shrubs to 1 time per week during March to October.	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 5	Moratorium or Net Zero Demand Increase on New Connections	<p>Limits on New Potable Water Service: Upon declaration of a Level 5 Water Shortage Crisis condition, the City may limit the issuance of new potable water services, temporary meters and/or statements of immediate ability to serve or provide potable water service (such as, will-serve letters, certificates, or letters of availability), except under the following circumstances:</p> <ul style="list-style-type: none"> - A valid, unexpired building permit has been issued for the project; - The project is necessary to protect the public health, safety, and welfare; - The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the City. - This provision does not preclude the resetting or turn-on of meters to provide continuation of water service or the restoration of service that has been interrupted for a period of one year or less. 	Yes
Level 5	Landscape - Limit landscape irrigation to specific days	No irrigation for turf, except turf utilized for active recreation at a school, park, or public facility may remain at 2 times per week during March to October.	Yes
Level 6	Landscape - Limit landscape irrigation to specific days	No irrigation allowed.	Yes
<p>Note: Active enforcement means utility AMI data would be mined to find water users not abiding by published schedule + utility to allocate funds to contract or hire 1 FTE enforcement officer.</p>			