3.0 Utilities and Community Services

This chapter addresses utilities and community services within the City of Milpitas. Utility services include the provision of water services, wastewater (sewer) services, solid waste disposal, electricity, and natural gas. Community services include fire protection, law enforcement, parks and recreation, schools, libraries, and other public facilities.

This chapter is divided into the following sections:

- 3.1 Utilities
  - 3.1.1 Water
  - 3.1.2 Wastewater
  - 3.1.3 Stormwater and Drainage
  - 3.1.4 Solid Waste
  - 3.1.5 Electricity and Natural Gas
- 3.2 Public Safety
  - 3.2.1 Fire Protection
  - 3.2.2 Law Enforcement
  - 3.2.3 Local Safety
- 3.3 Parks and Recreation
- 3.4 Schools, Libraries, and Other Public Facilities

3.1 Utilities

This section addresses the provision of utilities in the City of Milpitas, including water, wastewater (sewer), solid waste, electricity, and natural gas.

3.1.1 Water Services

This section describes the City of Milpitas’ water demands, water supplies, water distribution system, specific plans and master plan areas, and water quality.

Key Terms

Acre feet: The volume of one acre of water to a depth of one foot. Each acre-foot of water is equal to 325,851.4 gallons.

BGS: Below ground surface.

GPD: Gallons per day.

GPM: Gallons per minute.

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth’s surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called “aquifers” and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which
pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

**HCF:** Hundred Cubic Feet

**MG:** Million gallons.

**MGD:** Million gallons per day.

**Surface water:** Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is replenished naturally through precipitation, but is lost naturally through evaporation and seepage into soil.

**Regulatory Framework**

**State**

**California Department of Health Services**

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund (“SRF”) and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

**Consumer Confidence Report Requirements**

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

**Urban Water Management Planning Act**

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An “urban water supplier” is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier’s water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Department of Water Resources must receive a copy of an adopted urban water management plan.
Senate Bill (SB) 610 and Assembly Bill (AB) 901


SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must 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 these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill (SB) 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a “sufficient water supply” exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

LOCAL


The purpose of the 2015 Urban Water Management Plan (UWMP) is to ensure efficient use of urban water supplies in the City of Brentwood and promote conservation. The UWMP discusses not only the availability of water but also water use, reclamation, and water conservation activities. The UWMP complies with the Urban Water Management Planning Act (UWMP Act) (California Water Code [CWC] Section 10610 et seq.), the Water Conservation Act of 2009 (CWC Section 10608), and the 20x2020 Water Conservation Plan, which are being implemented by the California Department of Water Resources (DWR).

City of Milpitas Water Master Plan Update (2009)

The City’s 2009 Water Master Plan includes a summary of the City’s system-wide water demands, the planning criteria used to determine water system demands, the City’s water distribution system model, an analysis of the City’s water system, and a summary of existing and future water system facilities.
City of Milpitas General Plan
The existing City of Milpitas General Plan identifies the following principles, policies, and actions related to water supplies:

**Open Space and Environmental Conservation Element**
4.d-G-5: Protect and enhance the quality of water resources in the Planning area.

**Land Use Element**
2.d-G-1: Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.

2.d-I-1: Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.

2.d-I-2: Periodically update the City’s water and sewer master plans.

2.d-I-4: Use the design review process to consider and weigh the long term maintenance, resource needs, and costs of the design of private streets and other private infrastructure improvements.

2.d-I-5: When considering development proposals that are consistent with the underlying land use designation, seek opportunities for infrastructure improvements that would benefit the proposed project as well as the adjacent development that would lessen the burden on the overall tax base.

**Water Demands**
The City owns, operates and maintains a potable water distribution system with approximately 16,000 municipal water service connections (Milpitas UWMP, 2015). The City’s potable water system is shown on Figure 3.1-1.

The City purchases treated potable water from two wholesalers, the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD). Approximately 40% of the City’s potable water was from SCVWD in 2015, which is an increase from 25% from SCVWD in 2010. (Milpitas UWMP, 2015). The City began distributing SFPUC water in 1954, the same year the City of Manteca was incorporated. The City and SFPUC currently operate under a 25-year Water Supply Agreement, most recently signed in 2009.

In 1993, the City began delivering SCVWD supplies to the commercial and industrial areas of the City west of Highway 880 and south of Calaveras Boulevard west of Highway 690. The City’s potable water supply system is divided into two distinct service areas, corresponding to the areas served by the City’s two wholesalers: SFPUC and SCVWD. The City does not blend SFPUC and SCVWD water under normal operating conditions; however, they can be interconnected to provide an emergency water supply, if needed. (Milpitas UWMP, 2015).

The City’s total water demand in 2015 was 4,164,547 hundred cubic feet (HCF) per year. The city’s water use is predominantly by residential customers. Of the over 16,000 water service accounts, approximately 12,400 are single-family residential accounts. Single-family residential use accounts for 30% of total water consumption. Commercial accounts for 15% of total water use, Institutional/Governmental for 3% of total water use, Industrial for 16% of total water use, multi-family residential for 18% of total water use, landscape for 9% of total water use, and fire for 0.05% of total water use (City of Milpitas UWMP, 2015).
Water Supplies

Water Suppliers

The City of Milpitas has the following existing water suppliers:

- SFPUC: snowmelt from the Sierra Nevada, delivered through the Hetch Hetchy aqueducts, and treated water produced by SFPUC from its local watersheds and facilities in Alameda County; and
- SCVWD: treated surface water from the Penitencia and Santa Teresa treatment plant via the Milpitas Pipeline, which terminates in the City.

Additionally, the City of Milpitas is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA). The BAWSCA is discussed further below.

San Francisco Public Utilities Commission (SFPUC)

The City purchases wholesale water from the City and County of San Francisco’s regional water system. This supply is predominantly snowmelt from the Sierra Nevada, delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by SFPUC from its local watersheds and facilities in Alameda County. On June 2, 2009, the City entered into a 25-year Water Supply Agreement with the SFPUC. This agreement affirms the City the perpetual right to purchase up to 9.23 mgd of treated potable water unless SFPUC has a water shortage.

Santa Clara Valley Water District (SCVWD)

The City began receiving treated surface water from SCVWD in August 1993 under a September 1984 contract between the City and SCVWD. The supply delivery is adjusted annually based on a binding 3-year annual delivery schedule. The City’s annual purchase must be at least 90% of the delivery schedule and the City’s monthly “supply guarantee” is at least 15% of the annual delivery schedule. SCVWD provides treated water from its Penitencia and Santa Teresa treatment plant via its Milpitas Pipeline which terminates in the City.

Although the City purchases are currently limited to surface water largely purchased by SCVWD from the State Water Project and Central Valley Project, SCVWD’s overall water supply comes from a variety of sources. Nearly half is from local groundwater aquifers, and more than half is imported from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. Both groundwater and imported water are sold to retailers. SCVWD also manages the groundwater basin to the benefit of agricultural users and other independent users who pump groundwater. Local runoff is captured in SCVWD reservoirs for recharge into the groundwater basin or treatment at one of SCVWD’s water treatment plants. The total storage capacity of these reservoirs is about 170,000 acre-feet (AF).

The City operates and maintains a recycled water system. The system is owned by the City of San Jose South Bay Water Recycling Program (SBWR). The system has approximately 20 miles of recycled water mains and 50 water valves to serve one industrial and 180 irrigation customers in the City of Milpitas. In addition, in July of 2014, the SCVWD opened the Silicon Valley Advanced Water Purification Center, the largest advanced water treatment plant in Northern California. Microfiltration, reverse osmosis and ultraviolet light are used to improve up to 8 MGD of secondary treated wastewater from the WPCP to primary drinking water standards. Longer term, SCVWD is investigating the possibility of using this highly purified recycled water for replenishment of its groundwater basins.
Bay Area Water Supply and Conservation Agency (BAWSCA)

The BAWSCA is a special district created on May 27, 2003 by Assembly Bill 2058 to represent the interests of 24 cities and water districts, and two private utilities in Alameda, Santa Clara and San Mateo counties that purchase water on a wholesale basis from the San Francisco Regional Water System. BAWSCA is the only entity having authority to directly represent the needs of the cities, water districts and private utilities (wholesale customers) that depend on the regional water system. BAWSCA enables customers of the regional system to work with San Francisco on an equal basis to ensure the water system is reliable, and to collectively and efficiently meet local responsibilities.

BAWSCA has the authority to coordinate water conservation, supply, and recycling activities for its agencies; acquire water and make it available to other agencies on a wholesale basis; finance projects, including improvements to the regional water system; and build facilities jointly with other local public agencies or on its own to carry out the agency’s purposes. BAWSCA’s role in the development of the 2010 UWMP update is to work closely with its member agencies and SFPUC to maintain consistency between the multiple documents being developed and to ensure overall consistency with the Water Supply Improvement Program (WSIP) and the associated environmental documents.

To fulfill its role as a water supply agency, BAWSCA is developing a “Long-Term Reliable Water Supply Strategy” to quantify the water supply needs of the BAWSCA member agencies through 2035, and identify the water supply management projects to be developed necessary to meet that need. Under evaluation are groundwater, recycled water, water transfer, surface water and new reservoir storage, desalination, expanded conservation, and localized water capture and reuse projects.

WATER SUPPLIES

The City of Milpitas has the following existing water supplies:

- Surface Water;
- Groundwater;
- Emergency Interties; and
- Recycled (Non-Potable) Water.

Surface Water

Two thirds of the water supplied to the City comes from SFPUC, of which 85 percent is derived from the Tuolumne River, through the Hetch Hetchy reservoir in the Sierra Nevada Mountains, with 15 percent originating from local surface water sources. In recent years, the City has actually purchased about 1,700 million gallons per year from SFPUC. The City's agreement with SFPUC provides the perpetual right to purchase up to 9.23 million gallons per day (mgd) of treated potable water unless SFPUC has a water shortage. On an annualized basis, the available SFPUC supply would be approximately 3,369 million gallons per year.

About one third of the City’s water is supplied by the SCVWD. More than half of SCVWD’s total supply, and all of its supply to the City, comes from the State Water Project (supplied by the California Department of Water Resources from State-owned storage reservoirs) and the Central Valley Project (supplied by Federal water storage under the supervision of the US Bureau of Reclamation). Treated water is supplied to the City by the SCVWD’s Penitencia and Santa Teresa treatment plant via the Milpitas Pipeline. The supply delivery varies by year, based on an annual amount requested by the City on a 3-year contracted delivery schedule. For fiscal year 2016-2017, the delivery requested delivery is 119 million gallons (MG) (Milpitas, 2013). The City’s annual purchase is required to be at least 90 percent of the total estimated
water from the delivery schedule. Also, the City’s monthly “supply guarantee” is at least 15 percent of the annual schedule for that year, meaning that in any month, the City can purchase up to 15 percent of the year’s total delivery schedule water.

**Groundwater**

Currently, the City does not use groundwater to meet customer demands under normal conditions. The City has one existing well, Pinewood Well, and one planned, Curtis Well. These wells are located in the southwestern part of the City. Although Pinewood Well is permitted for active use, the City currently reserves groundwater supply for emergency supply in the event that SFPUC and SCVWD cannot deliver contract treated water supplies. Curtis Well is not yet constructed (City of Milpitas UWMP, 2015).

Local groundwater comes from the Santa Clara Valley Groundwater Basin. The basin is made up on unconsolidated alluvium. Within City boundaries, the eastern portion of the basin is unconfined and does not contain an aquitard to prevent contamination from spreading from surface to groundwater. The western portion of the City overlies a confined, aquitard-protected area with water of good quality.

Table 3.1-1 summarizes annual pumped groundwater volumes from 2011 to 2015.

**TABLE 3.1-1: GROUNDWATER (HISTORICAL VOLUME PUMPED, HCF PER YEAR)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>253</td>
<td>109</td>
<td>213</td>
<td>124</td>
<td>33</td>
</tr>
</tbody>
</table>

*Source: City of Milpitas Urban Water Management Plan (2015).*

Table 3.1-2 presents the volume of groundwater available to be pumped from 2020 to 2040. Projected percentages of total water supply remain consistent with those in the recent past (i.e., 2009 and 2010).

**TABLE 3.1-2: GROUNDWATER (VOLUME AVAILABLE, HCF PER YEAR)**

<table>
<thead>
<tr>
<th>Groundwater Reasonably Available Volume</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,219,920</td>
<td>1,561,498</td>
<td>2,439,840</td>
<td>2,439,840</td>
<td>2,439,840</td>
</tr>
</tbody>
</table>

*Source: City of Milpitas Urban Water Management Plan (2010).*
3.0 Utilities and Community Services

Emergency Interties
As a precaution, the City entered into agreements with the San Jose Water Company (SJWC) (located south of Milpitas) in March of 1973, and with the Alameda County Water District (ACWD) (located north of Milpitas) in December of 1995 to provide emergency water with as little as two hours’ notice. To date, the intertie with ACWD has been used three times to draw an emergency supply. The primary supply for the two ACWD interties is the South Bay Aqueduct. Other sources include the SFPUC and local wells (Milpitas, 2016a).

The SJWC intertie is designed to function only when the City’s water distribution system pressure experiences a significant drop. The agreement allows the City to receive water from SCVWD’s Penitencia Water Treatment Plant if the SJWC is not also experiencing a water supply emergency. This intertie has never been used.

Recycled (Non-Potable) Water
Recycled water is wastewater that has been treated to achieve a very high level of purity. Even though the treated water is very clean, it is not used for potable water (drinking water). The City operates and maintains a recycled water system. The system is owned by the City of San Jose South Bay Water Recycling Program (SBWR). The system has approximately 20 miles of recycled water mains and 50 water valves to serve one industrial and 180 irrigation customers in the City of Milpitas.

In addition, in July of 2014, the SCVWD opened the Silicon Valley Advanced Water Purification Center, the largest advanced water treatment plant in Northern California. Microfiltration, reverse osmosis, and ultraviolet light are used to improve up to 8 mgd of secondary treated wastewater from the San Jose/Santa Clara Water Pollution Control Plant (WPCP) to primary drinking water standards.

The source of this water is the San Jose/Santa Clara WPCP, renamed in 2013 to the San Jose-Santa Clara Regional Wastewater Facility. Treatment is provided by San Jose and Santa Clara, who are joint owners of the facility. The City of Milpitas pays a share of the capital cost of the recycled water facilities, based on the City’s 14.25 mgd capacity rights in proportion to the 167 mgd total capacity of the WPCP. The City also pays a share of the operating cost, based on the volume of wastewater discharged to WPCP.

The WPCP was originally constructed in 1956 and upgraded to an advanced tertiary treatment system in 1979. Most of the final treated water is discharged to the Artesian Slough and then flows into South San Francisco Bay. About 20 percent of the treated wastewater is recycled through either the SBWR or the new Silicon Valley Advanced Water Purification Center before being sent through SBWR pipelines for landscaping, agricultural irrigation, and industrial needs throughout the South Bay.

Even though this water is treated to drinking water standards, it is not used for drinking water. Instead, the water is blended into the existing recycled water provided by the SBWR. Recycled water is further discussed in Section 3.1.2, Wastewater, below.

Summary of Water Demands and Supplies
In 2016, the City of Milpitas developed an UWMP Update (Milpitas, 2016a). This UWMP documented the past, current, and projected future water demands and supplies through 2040, as shown in Table 3.1-3. As shown in the table, the City’s water demands are projected to increase to 7,462 MG per year (MG/year) by 2040. The City’s estimated water supply is projected to increase to 9,100 MG/year by 2040. Thus, even in the year 2040, the City should have a surplus supply of 1,458 MG/year.
### 3.0 Utilities and Community Services

#### Table 3.1-3: City of Milpitas Past and Projected Water Demands, Supplies, and Surpluses, MG/year

<table>
<thead>
<tr>
<th></th>
<th>Actual 2015</th>
<th>Projected 2020</th>
<th>Projected 2025</th>
<th>Projected 2030</th>
<th>Projected 2035</th>
<th>Projected 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potable Demand (a)</td>
<td>2,836</td>
<td>3,648</td>
<td>4,428</td>
<td>5,218</td>
<td>5,992</td>
<td>6,766</td>
</tr>
<tr>
<td>Recycled Water Demand (b)</td>
<td>279</td>
<td>375</td>
<td>650</td>
<td>719</td>
<td>805</td>
<td>875</td>
</tr>
<tr>
<td><strong>Total Demands (b)</strong></td>
<td><strong>3,115</strong></td>
<td><strong>4,023</strong></td>
<td><strong>5,078</strong></td>
<td><strong>5,937</strong></td>
<td><strong>6,797</strong></td>
<td><strong>7,642</strong></td>
</tr>
<tr>
<td>SFPUC Supply (c)</td>
<td>1,723</td>
<td>3,369</td>
<td>3,369</td>
<td>3,369</td>
<td>3,369</td>
<td>3,369</td>
</tr>
<tr>
<td>SCVWD Supply (c)</td>
<td>1,136</td>
<td>1,465</td>
<td>1,917</td>
<td>2,373</td>
<td>3,030</td>
<td>3,030</td>
</tr>
<tr>
<td>Groundwater Supply (c)</td>
<td>0</td>
<td>913</td>
<td>1,168</td>
<td>1,825</td>
<td>1,825</td>
<td>1,825</td>
</tr>
<tr>
<td>Recycled Water Supply (c)</td>
<td>277</td>
<td>375</td>
<td>650</td>
<td>719</td>
<td>805</td>
<td>875</td>
</tr>
<tr>
<td><strong>Total Supply</strong></td>
<td><strong>3,136</strong></td>
<td><strong>6,121</strong></td>
<td><strong>7,104</strong></td>
<td><strong>8,287</strong></td>
<td><strong>9,029</strong></td>
<td><strong>9,100</strong></td>
</tr>
<tr>
<td>Surplus (d)</td>
<td>0</td>
<td>2,098</td>
<td>2,026</td>
<td>2,349</td>
<td>2,232</td>
<td>1,458</td>
</tr>
</tbody>
</table>

**Notes:**
(a) Potable water demand projections from Milpitas, 2015, Table 4-2. 2015 Potable water demand from Table 4-1.
(b) Recycled water demand projections and total water demand projections from Milpitas, 2015, Table 4-3.
(c) Supply projections from Milpitas, 2015, Table 6-9. 2015 supply projection from Table 6-8.
(d) Surplus projections from Milpitas, 2015, Table 7-2.

Source: West Yost, October 2016.

The estimated potable water demand for the City is based on 2009 Urban Water Management Plan (RMC, 2009a), in turn based on the water use factors developed in the 2002 Water Master Plan. Updates to the planned growth and additional water recycling are reflected, but recent conservation measures undertaken in response to Statewide drought and the Governor’s mandatory demand factor reductions are not. Therefore, the estimates shown in the table above may be conservative.

The UWMP indicates that the population of the City was 72,606 people in 2015. The population which relies on the City’s supply was projected to increase to 109,100 people by 2040, according to the City’s most recent UWMP (Milpitas, 2016a). If the City’s growth projections and/or allocation of land use are updated as a result of the current General Plan update, then the ability to serve new growth may need to be reconsidered.

The City’s contract with SCVWD is renewed annually, with a varying amount of supply available from year to year. In addition, the amount of recycled water available from the SBWR is limited by the City’s ability to use and distribute the recycled water (up to 14.25 mgd capacity), and the cost to do so. Thus, while the demand supplied to the City in the future may vary in its origin, supply appears to be reliable throughout the planning horizon, even in dry periods.

In addition to the City’s efforts, regional suppliers are constantly focused on maintaining their supplies and reliability. As an example of regional opportunities, in the future, SCVWD’s Silicon Valley Advanced Water Purification Center and its distribution system may be used to recharge the groundwater aquifer with its tertiary treated effluent.

**Water Distribution System**

Wholesale potable water from SFPUC enters the City through three turnouts at Sunnyhills Court, Calaveras Boulevard, and Main Street (as shown on Figure 3.1-1), with a total estimated capacity of 31 mgd. Up to 14.4 mgd from SCVWD can enter the City via a turnout at Gibraltar Drive. The full distribution system...
3.0 Utilities and Community Services

supplies up to 45.4 mgd of treated water to approximately 16,000 service connections throughout the City through 245 miles of water mains.

The City’s potable water distribution facilities consist of the following components (Milpitas, 2011):

- 4 Turnouts;
- 5 Reservoirs (water tanks);
- 2 Emergency Wells (1 active and 1 soon to be active);
- 3 Emergency Interties;
- 5 Booster Pump Stations;
- 41 Isolation Valves; and
- 16 Pressure Regulating Valves.

Elevations in the distribution system range from sea level at the valley floor to 2,600 feet near Monument Peak. Because of the City’s topography, the water pressure varies at various locations. The distribution network is divided by elevation with six pressure zones created to allow water to flow from their perspective turnout stations and storage reservoirs to their zone of services. The SFPUC supply is distributed to four pressure zones. The SCVWD supply is distributed to two pressure zones in the valley floor area using pumps and pressure reducing systems with booster pumps providing water to the higher hillside elevations.

**Major Water System Issues and Opportunities**

In March 2015, the City completed a Water Supply Augmentation Feasibility Report (Water Solutions, 2015). The Report summarized an extensive effort to identify the most cost effective ways to increase both water supply and reliability. The greatest opportunities included additional groundwater wells, an expansion of the existing recycled water supply delivery and treatment infrastructure, and continued conservation efforts.

The City plans to construct treatment and operational improvements at Pinewood Well in the near future, and to complete the Curtis Well in the next three years. For customer acceptance, existing mineral, taste, and odor concerns at Pinewood Well would need to be addressed before introduction into the distribution supply. The Water Supply Augmentation Feasibility Report recommends in-pipe blending of the well water with imported treated surface water supplies to address these issues. The blending system would require the addition of a small booster pump. Additionally, a non-operational diesel drive at the Pinewood Well requires repair. The Curtis Well requires a well pad, submersible pump, downhole piping, submersible electrical cables, pump house, chlorine injection, treatment filters, and other components to be made operational. Testing, permitting, and regulatory compliance would also need to be addressed prior to operation of Curtis Well. Constructing additional wells has also been considered by the City to achieve a potential groundwater capacity of 8.2 mgd.

Recycled water has the potential to provide a supply limited only by treatment and distribution capacity. As such, the Water Supply Augmentation Feasibility Report focused on the need to prioritize these improvements. Extending the distribution system to incorporate loops will increase both reliability and potential market for recycled water. Physical improvements at the treatment plant could increase the percentage of the effluent (treated wastewater) that is recycled well beyond the current 10 percent.

Because of the City’s significant conservation efforts, the 2015 daily per capita water use was 107 gallons per person per day, which is below both the 2015 10-percent interim goal (targeting usage of 159 gallons
per capita per day), and the 2020 20-percent target reduction in usage (146 gallons per capita per day) specified in California’s 2009 Water Conservation Act (Milpitas, 2016a), and is among the lowest usage in the Bay Area. As identified in the Water Supply Augmentation Feasibility Study, the City plans to install smart meters to further their conservation efforts.

If the City’s future allocation of land use is updated as a result of the current General Plan effort, the ability to serve new growth may need to be reconsidered.

REFERENCES


San Jose-Santa Clara Regional Wastewater Facility 2015. 2015 Annual Self Monitoring Report.

San Jose/Santa Clara Water Pollution Control Plant. The Plant Master Plan. November 2013.

3.1.2 Wastewater
This section describes the City of Milpitas' wastewater infrastructure, wastewater flows, treatment plant permit requirements, and previous infrastructure planning.

**Key Terms**

**Effluent:** In the context of wastewater treatment plants, effluent is wastewater that has been through a treatment process to remove pollution and undesirable constituents from the water.

**NPDES:** Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

**WWTP:** Wastewater treatment plant. Treatment of wastewater may include the following processes: screening to remove large waste items; grit removal to allow sand, gravel, and sediment to settle out; primary sedimentation where sludge can settle out of the wastewater; secondary treatment to substantially degrade the biological content of the sewage; tertiary treatment to raise the quality of the effluent before it is discharged; and, discharge.

**Regulatory Framework**

**State**

**State Water Resources Control Board/Regional Water Quality Control Board**
In California, all wastewater treatment and disposal systems fall under the overall regulatory authority of the State Water Resources Control Board (SWRCB) and the nine California Regional Water Quality Control Boards (RWQCBs), who are charged with the responsibility of protecting beneficial uses of State waters (ground and surface) from a variety of waste discharges, including wastewater from individual and municipal systems. The City of Milpitas falls within the jurisdiction of the San Francisco Bay RWQCB.

The RWQCB's regulatory role often involves the formation and implementation of basic water protection policies. These are reflected in the individual RWQCB's Basin Plan, generally in the form of guidelines, criteria and/or prohibitions related to the siting, design, construction, and maintenance of on-site sewage disposal systems. The SWRCB's role has historically been one of providing overall policy direction, organizational and technical assistance, and a communications link to the State legislature.

The RWQCBs may waive or delegate regulatory authority for on-site sewage disposal systems to counties, cities or special districts. Although not mandatory, it is commonly done and has proven to be administratively efficient. In some cases this is accomplished through a Memorandum of Understanding (MOU), whereby the local agency commits to enforcing the Basin Plan requirements or other specified standards that may be more restrictive. The RWQCBs generally elect to retain permitting authority over large and/or commercial or industrial on-site sewage disposal systems, depending on the volume and character of the wastewater.
LOCAL

City of Milpitas Sewer Master Plan Update (2009)
The City’s 2009 Sewer Master Plan includes a description and maps of the City’s wastewater collection system, system-wide flow projections, hydraulic models of system flows, an analysis of the system’s capacity, a summary of system capacity improvements that are needed, and a summary of the current related CIP schedule and costs for wastewater system improvements.

City of Milpitas Sewer System Management Plan (2014)
In May 2006, the State Water Resources Control Board (SWRCB) implemented Order No. 2006-0003-DWQ. Any municipality that owns or operates a sanitary sewer system greater than 1.0 mile in length and that collects and/or conveys untreated or partially treated wastewater to publicly owned treatment plants in the State of California is required to comply with the terms of this order. This order requires the development and implementation of a system-specific Sanitary Sewer Management Plan (SSMP). The City’s SSMP facilitates the overall management of the City of Milpitas’ sewer system.

The SSMP is intended to meet the requirements of the Statewide General Waste Discharge Requirements (GWDR). The SSMP includes eleven elements, as listed below:

1. Goals
2. Organization
3. Legal Authority
4. Operation and Maintenance Program
6. Overflow Emergency Response Plan
7. Fats, Oils and Grease (FOG) Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement, and Program Modification
10. SSMP Program Audits
11. Communication Program

City of Milpitas General Plan
The existing City of Milpitas General Plan identifies the following goals and policies related to wastewater services:
3.0 Utilities and Community Services

**Land Use Element**
2.d-G-1: Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.

2.d-I-1: Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.

2.d-I-2: Periodically update the City’s water and sewer master plans.

2.d-I-4: Use the design review process to consider and weigh the long term maintenance, resource needs, and costs of the design of private streets and other private infrastructure improvements.

2.d-I-5: When considering development proposals that are consistent with the underlying land use designation, seek opportunities for infrastructure improvements that would benefit the proposed project as well as the adjacent development that would lessen the burden on the overall tax base.

**Open Space & Environmental Conservation Element**
4.d-G-5: Protect and enhance the quality of water resources in the Planning area.


4.d-P-3: Work cooperatively with other cities, towns, and the Santa Clara Valley Water District to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin.

**Wastewater Treatment**
The City’s current sanitary sewer system, the San Jose/Santa Clara WPCP, the SBWR, and the Silicon Valley Advanced Water Purification Center (SVAWPC) are discussed below.

**City Sewer System**
The City of Milpitas comprises 13 square miles of residential, commercial, industrial, agricultural, and recreational land uses, with a residential population of just over 72,000 people. The City’s sewer utility is a self-supporting enterprise. Revenues derived from sewer rates and other sources, including reserves, is sufficient to cover all operating and capital expenditures each year. The City’s rate structure requires each customer or class to pay sewer rates in proportion to the cost of service received. Milpitas customer rates are allocated based on estimated wastewater flows and strengths. The sewer enterprise maintains four separate funds including the Sewer, Sewer Capital Improvement, Treatment Plant Construction, and Sewer Infrastructure Funds. Each of these funds is treated as a separate accounting entity. The City aims to balance its budgets each year. Fund reserves generated in surplus years are typically used to make up any revenue shortfalls in deficit years.

**San Jose-Santa Clara Regional Wastewater Facility (RWF)**
Currently, all wastewater collected from the City is treated at the RWF, which has a wastewater treatment capacity of 167 mgd. Current flows to the plant are about of 110 mgd (San Jose, 2015a). The RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 2-3), Saratoga, Campbell, Los Gatos, Monte Sereno (via the West Valley Sanitation District), Santa Clara, Milpitas, and Cupertino. The RWF’s treatment capacity is allocated to each tributary agency on the basis of the peak five-day dry weather flow, also referred to as the peak week flow. The City recently purchased an additional 1.0 mgd of capacity at the plant from West Valley Sanitation District and 0.75 mgd of capacity from Cupertino Sanitary District to
bring the City’s total contracted peak week flow capacity at the plant to 14.25 mgd. The 2015 peak dry weather flow to the plant was 96.15 mgd, with 6.71 mgd attributed to the City (San Jose, 2015b).

**Table 3.1-4: 2015 San Jose-Santa Clara Regional Wastewater Facility Flows and Available Capacities**

<table>
<thead>
<tr>
<th>Agency</th>
<th>2015 Plant Capacity, MGD</th>
<th>2015 Peak Week Flow, MGD</th>
<th>Available Capacity, MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Jose</td>
<td>108.89</td>
<td>61.18</td>
<td>47.71</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>22.94</td>
<td>12.89</td>
<td>10.05</td>
</tr>
<tr>
<td>West Valley Sanitation District</td>
<td>11.70</td>
<td>10.26</td>
<td>1.44</td>
</tr>
<tr>
<td>Cupertino Sanitary District</td>
<td>7.85</td>
<td>3.9</td>
<td>3.95</td>
</tr>
<tr>
<td>City of Milpitas</td>
<td>14.25</td>
<td>6.71</td>
<td>7.54</td>
</tr>
<tr>
<td>County Sanitation District 2-3</td>
<td>0.98</td>
<td>0.98</td>
<td>0.00</td>
</tr>
<tr>
<td>Burbank Sanitary District</td>
<td>0.40</td>
<td>0.24</td>
<td>0.16</td>
</tr>
<tr>
<td>Total</td>
<td>167.00</td>
<td>96.15</td>
<td>70.85</td>
</tr>
</tbody>
</table>

*Source: West Yost, October 2016.*

All of the wastewater generated in the City of Milpitas’ Sewer Service Area is treated at the RWF. The RWF location, just west of Milpitas and north of San Jose on the San Francisco Bay, is shown on Figure 3.1-2 and includes the following major processes/facilities (San Jose, 2016):

- **Headworks and Grit Chambers** – The screening facilities remove the larger trash and grit from the raw wastewater. The wastewater enters the headworks in sewers that are buried underground, and the headworks area is also below the ground level. From the headworks, the wastewater is pumped into pipes that flow to the primary settling tanks.

- **Primary Settling Tanks** – These tanks allow finer sediment to settle out of the effluent and skim fats, oils, and grease from the top. The treatment occurs over an hour-long period and results in effluent that is 50 percent cleaner than the raw wastewater entering the RWF. Wastewater leaving the settling tanks is called primary effluent, and flows to the aeration and clarification system.

- **Aeration and Clarification** – The aeration tanks pump air into the wastewater to increase the growth of bacteria and other micro-organisms that consume organic waste. These bacteria and micro-organisms then settle out of the wastewater in the clarifiers. The flow leaving the clarifiers is called secondary effluent, and it is 95 percent cleaner than the raw wastewater entering the RWF. At this point, the majority of secondary treated effluent continues to tertiary treatment (filters), while around 7 percent is diverted to the new SVAWPC.

- **Filters** – The filters remove small suspended solids from the secondary effluent. Flow from the filters goes to the Chlorine Contact Basin.

- **Chlorine Contact Basin** – This basin uses chlorine to kill any remaining viruses and bacteria. The chlorine is then neutralized to protect aquatic life in the receiving water (Coyote Creek). Effluent leaving the Chlorine Contact Basin is called tertiary effluent and is 99 percent cleaner than wastewater entering the RWF.

- **Distribution** – The ultimate disposal of the fully treated effluent is divided, with 90 percent piped to the outfall channel leading to Coyote Creek and then into the South San Francisco Bay, while 13 percent flows to the SBWR system.
3.0 UTILITIES AND COMMUNITY SERVICES

- **Solids Treatment** – The bacteria and micro-organisms that settle out of the wastewater in the clarifiers are called the solids. Flotation thickeners, digesters, lagoons, and drying beds are used to extract liquid from the solids. The liquid is returned to the primary settling tanks. The remaining solids are treated in a digester that stabilizes the solids. The stable solids are then dried in the sun and trucked to the Newby Island Landfill to be used as daily cover. The full solids handling process takes over 3½ years to complete.

**SOUTH BAY WATER RECYCLING PLANT (SBWR)**

Approximately 13 percent of tertiary treated effluent from the RWF goes directly to the adjacent SBWR main pump station, which delivers an annual average of 10.6 mgd to over 750 recycled water customers in San Jose, Santa Clara, and Milpitas. End users in the City of Milpitas primarily include City irrigators and industrial users. The plant is administered by the City of San Jose and the system comprises a north-south artery across San Jose and an east-west artery from mid-Milpitas south through the eastern side of Santa Clara. These main arteries feed extension pipelines to reach various customers. The system includes (San Jose, 2016):

- 140 miles of pipeline;
- 5 pump stations; and
- 3 above-ground storage reservoirs that together have a storage capacity of 9.5 MG.

Potential demand for recycled water has been estimated by the South Bay Water Recycling Report (RMC, et al., 2014) as 2,200 acre-feet per year in the long term.

**SILICON VALLEY ADVANCED WATER PURIFICATION CENTER**

Beginning in March of 2014, the RWF began supplying secondary treated wastewater to the SVAWPC, which in turn purifies the water with the following technologies (SCVWD, 2016) before being sent to the SBWR to blend with their supply and enhance water quality to SBWR’s customers:

- Microfiltration – an initial filtration process where water is pumped through tubes filled with tiny membranes. Solids, bacteria, protozoa, and some viruses are removed from the water as it is drawn through the tubes.
- Reverse Osmosis – water is forced under high pressure through membranes that remove constituents such as salts, viruses, and most contaminants, including pharmaceuticals, personal care products, and pesticides.
- Ultraviolet Light – ultraviolet light breaks down trace organic compounds in a powerful disinfection process that creates water of very high quality.

The plant has a capacity of 8 mgd and is currently considered a demonstration project with future expansion expected.

**WASTEWATER FLOWS**

Wastewater flows are typically evaluated for several conditions, including the following:

- **Average Dry Weather Flow (ADWF)** is the highest five-weekday period from June through October.
- **Average Dry Weather Influent Flow (ADWIF)** is the highest five-weekday period from June through October.
- Average Dry Weather Effluent Flow (ADWEF) is the lowest average Effluent flow for any three consecutive months between the months of May and October

The City’s most recent Sewer Master Plan Update (RMC, 2009b), was based on revisions to projected land use including 19 General Plan Amendments throughout the City and the Milpitas Transit Area Specific Plan. These updates reflect conversion of existing land use types to higher density multi-family residential that will produce a significant increase of sewer flows and necessitate capital improvements to convey the increased flows. The Sewer Master Plan Update also reflected changes in the contributions of large water users, which are expected to decrease.

As part of the Sewer Master Plan Update, modeling of the City’s sewer system was performed. The three land use categories projected to contribute most significantly to future demand are listed below, with percentages that each contributes to the overall increase.

1. Residential – increasing by approximately 3,150 acres (41 percent);
2. Industrial – increasing by approximately 1,281 acres (21.2 percent); and
3. Commercial – increasing by approximately 450 acres (7.5 percent).

Model results indicated that an average dry weather flow of 13.5 mgd would be required to meet the City’s current growth plan at buildout. This predicted average dry weather flow does not require capacity purchases or immediate improvements to the RWF, as the City has 8.29 mgd of capacity remaining. However, the Wastewater Treatment Plant Master Plan (San Jose, 2013) indicates that the RWF will reach its rated capacity of 167 mgd between 2035 and 2040, and dry weather flows are projected to reach 172 mgd by 2040, triggering the need for a modification the RWF’s NPDES permit.

**Wastewater Collection System**

As noted previously, the City of Milpitas comprises 13 square miles of residential, commercial, industrial, agricultural, and recreational land uses, with a residential population of just over 72,000 people. The City’s owns and operates its own collection system, including 17,000 main sewer connections, 175 miles of gravity pipe, 5 miles of force main, and two pump stations. The Venus Pump Station, with a capacity of 1.6 mgd, serves around 1,200 homes in the low-lying Pines Neighborhood. The Main Sewer Station has a capacity of 45 mgd, which pumps sewage through 2.5 miles of dual force main to the RWF. (Milpitas, 2014). The City’s sewer facilities are shown on Figure 3.1-2.

**Planned Future Infrastructure**

Recommendations in the 2014 Sewer System Master Plan (RMC, 2009b) for system improvements included collection system capacity improvements necessitated by the higher density Transit Area Specific Plan and the 19 General Plan Amendment land uses. In September 2008, the Milpitas City Council adopted a Transit Area Development Impact Fee to pay for these improvements. Some of these improvements have already been completed, including construction of the City’s Main Lift Station Replacement project (which increased capacity to 45 mgd), and rehabilitation of the Venus Pump Station which was completed in the spring of 2009 (which increased capacity to 1.6 mgd).

Additional collection system projects the City plans to complete in the future are primarily focused around sewer system replacements and upgrades. The City experiences very few sewer system overflows. Operational deficiencies are typically due to structural settlement, such as sewer pipe sags. In the past, the City’s video inspection program has confirmed that many sewer lines have structural deficiencies.
Currently, improvements are prioritized based on the results of the hydraulic modeling effort of the Sewer Master Plan Update. The required improvements are included in the City’s Capital Improvement Plan.

The RWF has been in operation since 1956 and aging pipes, pumps, concrete and electrical systems are all in need of immediate and long-term improvements to ensure current and future needs are met. The 2013 Wastewater Treatment Plant Master Plan (San Jose, 2013) indicates the cost of capital improvements through 2040 will be $2.2 billion. Despite a steady increase in the population served by the RWF, influent wastewater flows have decreased over the past 15 years due to the loss of industry and increased water conservation. This same trend is common throughout the Bay Area. However, flows are expected to increase in the future as new homes are built to house the 400,000 new residents in San José over the next 30 years. While the RWF has over 70 mgd of remaining capacity, it is expected to reach capacity between 2035 and 2040, according to the Wastewater Treatment Plant Master Plan (San Jose, 2013).

Treatment capacity consists of four components: flow, biochemical oxygen demand (BOD), suspended solids, and ammonia. As increasing capacity is needed, the City has four options to meet the need including:

- Purchase of additional capacity as the treatment plant is expanded.
- Purchase rights to use excess capacity held by other tributary agencies.
- Adopt mutual agreements with other tributary agencies for use of excess capacity when needed.
- Pursue other regional solutions.

The City’s 2009 purchase of treatment capacity from Cupertino Sanitary District included 0.75 mgd of RWF capacity, bringing Milpitas’ total available treatment capacity to 14.25 mgd of flow, suspended solids, and ammonia capacity. Because Cupertino Sanitary District did not have excess BOD treatment capacity available, the City acquired three of the four treatment components. The City plans to monitor their wastewater flow and procure adequate BOD treatment capacity as needed (Milpitas, 2014).

If the City’s future allocation of land use is updated as a result of the current General Plan effort, the ability to serve new growth may need to be reconsidered.

REFERENCES


San Jose/Santa Clara Water Pollution Control Plant. The Plant Master Plan. November 2013.

San Jose-Santa Clara Regional Wastewater Facility 2015. 2015 Annual Self Monitoring Report.

3.1.3 STORMWATER AND DRAINAGE

Provided below is a discussion of the creeks and stormwater/flood control systems that serve the City of Milpitas.

REGULATORY SETTING

FEDERAL

Clean Water Act (CWA)

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for small Municipal Separate Storm Sewer Systems (MS4s) covered under the CWA to efficiently regulate numerous storm water discharges under a single permit.

Pursuant to the CWA, Milpitas participates in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) as a co-permitee under the California Regional Water Quality Control Board’s San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), also referred to as the “MS4 Permit.” Permit number CAS612008 became effective in November of 2015. The City has typical urban runoff water quality issues and is working on implementing a 70 percent reduction in trash load by July 1, 2017, focused around trash capture on 100 acres of high or very high trash generating land uses.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act’s implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act’s goal of “fishable and swimmable” navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are
issued for five years or less, and therefore must be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the San Francisco Bay Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

STATE

California Water Code

California’s primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California’s responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region’s ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.
3.0 Utilities and Community Services

Local

California Regional Water Quality Control Board's San Francisco Bay Region
Municipal Regional Stormwater NPDES Permit Order R2-2015-0049 (NPDES Permit No. CAS612008) November 2015

The City of Milpitas participates in the SCVURPPP as a co-permittee under the California Regional Water Quality Control Board's San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), also referred to as the “MS4 Permit.” Permit number CAS612008 became effective in November of 2015. The City has typical urban runoff water quality issues and is working on implementing a 70 percent reduction in trash load by July 1, 2017, focused around trash capture on 100 acres of high or very high trash generating land uses.

Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP)

The SCVURPPP is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. Member agencies (Co-permittees) include the cities of Campbell, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale, the towns of Los Altos Hills and Los Gatos, the County of Santa Clara, and the SCVWD. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The SCVURPPP also promotes valuing stormwater as an important resource.

The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. Total population within the SCVURPPP area is approximately 1.7 million people. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

C.3 Stormwater Handbook

The C.3 Stormwater Handbook was written to help developers, builders, and project applicants include appropriate post-construction stormwater controls in their projects, to meet local municipal requirements and requirements of the Bay Area Municipal Regional Stormwater Permit (MRP). Municipalities covered by the MRP include: Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Saratoga, Sunnyvale, Santa Clara County, and the Santa Clara Valley Water District. These municipalities must require post-construction stormwater controls on development projects as part of their obligations under Provision C.3 of the MRP. This permit is a NPDES permit issued by the San Francisco Bay RWQCB, allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants.

The term “post-construction stormwater control” refers to permanent features included in a development project to reduce pollutants in stormwater and/or erosive flows during the life of the project – after construction is completed. The term “post-construction stormwater control” encompasses Low Impact Development (LID) site design, source control, and treatment measures as well as hydromodification management measures. LID techniques reduce water quality impacts by preserving and re-creating natural landscape features, minimizing imperviousness, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource.
City of Milpitas Storm Drain Master Plan (2013)
This document identifies the capital improvements needed to maintain recommended levels of protection against storm water runoff, and the need for a revenue stream that will allow the necessary capital improvements to be made, and the storm drain system kept in working order into the future. The Master Plan contains drainage standards, summarizes the major drainage facilities in the area, evaluates the storm drain collection system and pump stations, analyzes storm drain impacts from new development, identifies capital improvements, outlines the operations, maintenance, and replacement methods, and identifies funding requirements.

City of Milpitas General Plan
The existing City of Milpitas General Plan identifies the following goals and policies related to hydrology and water quality:

**Land Use Element**
2.d-G-1: Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.

2.d-I-1: Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.

2.d-I-4: Use the design review process to consider and weigh the long term maintenance, resource needs, and costs of the design of private streets and other private infrastructure improvements.

2.d-I-5: When considering development proposals that are consistent with the underlying land use designation, seek opportunities for infrastructure improvements that would benefit the proposed project as well as the adjacent development that would lessen the burden on the overall tax base.

**Open Space & Environmental Conservation Element**
4.d-G-1: Assure reasonable protection of beneficial uses of creeks and South San Francisco Bay, and protect environmentally sensitive areas.

4.d-G-2: Comply with regulatory requirements pertaining to water quality.

4.d-G-3: Continuously improve implementation of stormwater pollution-prevention activities.

4.d-G-4: Mitigate the effects that land development can have on water quality.

4.d-G-5: Protect and enhance the quality of water resources in the Planning area.

4.d-P-1: Implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Water Board’s stormwater NPDES permit.

4.d-P-2: Minimize the use of pesticides that may effect water quality.

4.d-P-3: Work cooperatively with other cities, towns, and the Santa Clara Valley Water District to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin.

4.d-P-4: Where consistent with other policies, preserve, create, or restore riparian corridors and wetlands. Where possible, set back development from these areas sufficiently to maximize habitat values.
4.d-P-5: Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and significant trees, and maintain natural drainage patterns.

4.d-P-6: Where possible, avoid new outfalls to natural or earthen channels.

4.d-P-7: Applicable projects shall minimize directly connected impervious area by limiting the overall coverage of paving and roofs, directing runoff from impervious areas to adjacent pervious areas, and selecting permeable pavements and surface treatments.

4.d-P-8: Applicable projects shall incorporate facilities (BMPs) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

4.d-P-9: Applicable projects shall control peak flows and duration of runoff where required to prevent accelerated erosion of downstream watercourses.

4.d-P-10: Projects accommodating outdoor activities, including work areas, storage areas or other areas that are potential sources of stormwater pollutants, shall incorporate measures to control those pollutant sources to the maximum extent practicable.

4.d-P-11: Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

4.d-P-12: Construction sites shall incorporate measures to control erosion, sedimentation, and the generation of runoff pollutants to the maximum extent practicable. The design, scope and location of grading and related activities shall be designed to cause minimum disturbance to terrain and natural features. (Title II, Chapter 13 of the Municipal Code includes requirements for control of erosion and sedimentation during grading and construction.)

Watersheds

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special-status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

The State of California uses a hierarchical naming and numbering convention to define watershed areas for management purposes. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. Table 3.1-5 shows the primary watershed classification levels used by the State of California. The second column indicates the approximate size that a watershed area may be within a particular classification level, although variation in size is common.

Hydrologic Region

The Planning Area is located within the San Francisco Hydrologic Region, which covers approximately 2.8 million acres (4,500 square miles) and includes all of San Francisco and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. Significant geographic features include the Santa Clara, Napa, Sonoma, Petaluma, Suisun-Fairfield, and Livermore valleys; the Marin and San Francisco peninsulas; San Francisco, Suisun, and San Pablo bays; and the Santa Cruz Mountains, Diablo Range, Bolinas Ridge, and Vaca Mountains of the Coast Range. While being the smallest in size of the 10 Hydrologic Regions, the region has the second largest population in the State. Major population centers include the cities of San Francisco, San Jose, and Oakland.
Table 3.1-5: State of California Watershed Hierarchy Naming Convention

<table>
<thead>
<tr>
<th>Watershed Level</th>
<th>Approximate Square Miles (Acres)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrologic Region (HR)</td>
<td>12,735 (8,150,000)</td>
<td>Defined by large-scale topographic and geologic considerations. The State of California is divided into ten HRs.</td>
</tr>
<tr>
<td>Hydrologic Unit (HU)</td>
<td>672 (430,000)</td>
<td>Defined by surface drainage; may include a major river watershed, groundwater basin, or closed drainage, among others.</td>
</tr>
<tr>
<td>Hydrologic Area (HA)</td>
<td>244 (156,000)</td>
<td>Major subdivisions of hydrologic units, such as by major tributaries, groundwater attributes, or stream components.</td>
</tr>
<tr>
<td>Hydrologic Sub-Area (HSA)</td>
<td>195 (125,000)</td>
<td>A major segment of an HA with significant geographical characteristics or hydrological homogeneity.</td>
</tr>
</tbody>
</table>


Hydrologic Unit

The Planning Area is within the Lower Penitencia Creek-Frontal San Francisco Bay Estuaries, Arroyo Hondo, San Francisco Bay Estuaries, and Agua Caliente Creek-Frontal San Francisco Bay Estuaries Hydrology Units. The majority of the Planning Area is in the Lower Penitencia Creek-Frontal San Francisco Bay Estuaries hydrologic unit, which covers approximately 30.40 square miles. The northeastern portion of the Planning Area is located in the Arroyo Hondo hydrologic unit, which covers approximately 37.75 square miles. The northwestern portion of the Planning Area is located in the San Francisco Bay Estuaries hydrologic unit, which covers approximately 0.23 square miles. The northern boundary of the Planning Area is located in the Agua Caliente Creek-Frontal San Francisco Bay Estuaries hydrologic unit, which covers approximately 26.39 square miles. Figure 3.1-3 illustrates the boundaries of the hydrologic units relative to the Planning Area.

Hydrologic Area

For purposes of planning on a city-wide basis, hydrologic areas are generally considered to be the appropriate watershed planning level. As a planning area becomes smaller the hydrologic area level may be too large in terms of scale, and a hydrologic subarea may be considered more appropriate. The Planning Area is located within the Coyote Creek, Fremont Bayside, and Alameda Creek Hydrologic Areas.

Hydrologic Sub-Area

There are numerous hydrologic sub-areas within and throughout Milpitas and the city’s Planning Area. Analysis of hydrologic sub-areas is appropriate for the review of individual projects, but is not appropriate for the watershed analysis of the City’s General Plan.

Creeks and Flood Control Facilities

Flooding within Milpitas is caused by two basic interrelated factors: 1) major creeks and channels that overflow due to limited capacity in relation to flood flows; and 2) inadequate capacity of local drainage facilities. A summary of the Milpitas storm drain system, stormwater and flood control issues, and potential flood issues due to sea level rise are discussed below.

General Description and Summary of the Storm Drain System

Milpitas has a mild coastal climate with average temperatures ranging from 46°F in the winter to 71°F in the summer. The summer, from May to October, brings very little precipitation, but winters bring an
average of 14 to 18 inches per year. Winter precipitation can cause flooding of local creeks, as well as surcharging of the City’s drainage system. The City lies at the base of the Diablo Range to the east, extending from the foothills to the San Francisco Bay. The City generally drains from the southeast to the northwest. Elevations range from 40 feet above mean sea level to nearly 800 feet near the Calaveras Reservoir. Drainage patterns have been altered by urbanization and runoff has increased, creating an ever increasing risk of flooding (Schaaf & Wheeler, 2013).

Stormwater runoff is collected in a system of nearly 77 miles of storm drain pipelines ranging from 3-inches to 96-inches in diameter, with outfalls and pumping stations along the City’s major waterways that ultimately drain to the San Francisco Bay. Each of the city’s storm drainage collection systems discharges into one of Coyote Creek’s tributaries, whether by gravity or by pumping. Milpitas owns and operates 13 storm water pumping stations, but the Santa Clara Valley Water District manages most of the natural and urbanized waterways into which Milpitas discharges its stormwater. Major waterways in Milpitas include:

- Los Coches Creek;
- Berryessa Creek;
- Coyote Creek;
- Calera Creek;
- Ford Creek;
- Lower Penetencia Creek;
- Piedmont Creek;
- Wrigley Creek;
- Wrigley-Ford Creek; and
- Tularcitos Creek.

The City’s storm drain system is shown on Figure 3.1-4.

As noted previously, Milpitas participates in the SCVURPPP, an association of fifteen regional cities and towns whose participating members are required to implement the stormwater pollution management measures outlined in the Santa Clara Valley Urban Runoff Management Plan to control the quality of their stormwater discharge. SCVURPPP members must comply with the California Regional Water Quality Control Board’s San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), which regulates the quality and quantity of stormwater discharge to receiving waters. Permit number CAS612008 became effective in November of 2015. The City has typical urban runoff water quality issues, including trash, illicit discharges, and commercial and industrial runoff and is working on implementing a 70 percent reduction in trash load by July 1, 2017, focused around trash capture on 100 acres of high or very high trash generating land uses.

The City’s stormwater system design is based on both the 10-year storm hydraulic grade line no higher than two feet below the top of curb elevation at any manhole or drain inlet and the 100-year hydraulic grade line not exceeding the top of manhole or drain inlet, in accordance with the storm drain design criteria set forth by the City of Milpitas in its July 15, 2010, standards and the Santa Clara County Drainage Manual (Santa Clara County, 2007). Nevertheless, large storm events (10-year events and above) have the potential to cause overflows of the City’s drainage system. The primary causes are undersized storm drains, sedimentation within the collection system, and flat and adverse street grades. Even the 10-year water surface elevation in the creek may be higher than the ground surface a block away. Pump stations provide solutions in some areas, though not all, and flooding problem areas persist, as noted by the proposed 22 high priority (with potential damage from 10-year flood events) and 31 medium priority (with
3.0 Utilities and Community Services

potential damage from the 100-year event outside a floodplain) projects listed in the Storm Drain Master Plan (Schaaf & Wheeler, 2013).

STORMWATER AND FLOOD CONTROL ISSUES
The City rehabilitated six of its thirteen existing stormwater pump stations in preparation for the 2015-2016 winter season (which had been forecast as an El Niño weather pattern with a high risk of very large storms). In addition to the emergency repairs and service of six pump stations, a condition assessment of all 13 pump stations was conducted to develop a better understanding of other improvement projects that may be needed in the future. Although the 2015-2016 storm season went smoothly, recommendations for future work included the replacement of underground storage tanks with above ground tanks to facilitate access, putting contracts into place in advance to quickly service high value/complex assets, and implementing a combination of electric and diesel pumps at pump stations (West Yost, 2016).

In the City's Storm Drain Master Plan (Schaaf & Wheeler, 2013), 22 high priority capital improvement projects were identified to improve drainage in flood-prone areas throughout the City. These included storm drain improvements, pump station repair and replacements and the installation of relief drains. While the needed improvements and expected costs, totaling some $65M, are identified in the Storm Drain Master Plan, a revenue stream was not identified, and major pump station repairs and replacements are beyond the annual budget allocation.

If the City’s future allocation of land use is updated as a result of the current General Plan effort, the ability to serve new growth may need to be reconsidered.

SEA LEVEL RISE AND CLIMATE CHANGE
Sea level rise due to climate change is a potential concern for the City of Milpitas, which is situated on, and drains to, the San Francisco Bay. The Pacific Institute (Pacific Institute, 2009) estimated that impacts from a 55-inch sea level rise would extend as far inland as to the south of Tasman Drive, north of Levi’s Stadium, and beyond North Milpitas Boulevard to the east. Sea level rise is expected to impact the size of the City’s floodplains, the frequency of flooding along major and minor waterways, and the ability of the drainage system to function correctly. For example, a storm drain on North Hillwood Drive already fails to meet performance standards because the 100-year water surface elevation in Tularcitos Creek is higher than the street grade at the intersection with Del Rio Court. If the sea level rises by 55 inches, a pump station may be needed at this and other locations in the future. There is also an increased risk of flooding from extreme weather events due to climate change. Additional information related to sea level rise and climate change is include in Section 4.0 (Hazards, Safety and Noise).

FLOODPLAIN MAPPING
Flood hazards in the City of Milpitas are described in the Federal Emergency Management Agency’s (FEMA’s) February 19, 2014 Flood Insurance Study, but are largely based on hydraulic modeling performed in the 1970s and 1980s (FEMA, 2014). A significant portion of the City, particularly west of Interstate 680, is mapped within a Special Flood Hazard Area. Major sources of flooding include Calera, Penitencia, Berryessa, Los Coches, and Tularcitos Creeks. Local drainage systems may also contribute to flood risk, but are not evaluated or mapped by FEMA. In addition, portions of the City may be at risk of inundation from upstream dam failure, with very little warning time.

FEMA identifies Special Flood Hazard Areas (SFHA). FEMA publishes Flood Insurance Rate Maps that depict the floodplains. The City of Milpitas contains areas within the 1% annual chance flood hazard zone (100-year flood), the 0.2% annual chance flood hazard zone (500-year flood), and areas of undetermined flood...
hazard. As noted above, the areas located within the 1% and 0.2% annual chance flood hazard zones are primarily concentrated to the west of Interstate 680, while the areas of undetermined flood hazard are located primarily within the hillside areas in the eastern planning area, east of Interstate 680. FEMA flood maps are included on Figure 4.4-1 in Section 4.0 (Hazards, Safety, and Noise).

**STORMWATER QUALITY**

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminants in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

**303(d) Impaired Water Bodies:** Section 303(d) of the Federal Clean Water Act requires states to identify waters that do not meet water quality standards or objectives and, thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the states to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

The Planning Area has one water body listed on the 2012 Section 303(d) list of impaired water bodies. Coyote Creek (Santa Clara County) is listed as Category 5 segment, which means it is a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.
3.0 UTILITY AND COMMUNITY SERVICES

REFERENCES


3.1.4 SOLID WASTE
The City of Milpitas has a franchise agreement for solid waste services with Republic Services (formerly Allied Waste).

KEY TERMS
Class I landfill: A landfill that accepts for disposal 20 tons or more of municipal solid waste daily (based on an annual average); or one that does not qualify as a Class II or Class III municipal solid waste landfill.

Class II landfill: A landfill that (1) accepts less than 20 tons daily of municipal solid waste (based on an annual average); (2) is located on a site where there is no evidence of groundwater pollution caused or contributed by the landfill; (3) is not connected by road to a Class I municipal solid waste landfill, or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill; and (4) serves a community that experiences (for at least three months each year) an interruption in access to surface transportation, preventing access to a Class I landfill, or a community with no practicable waste management alternative.

Class III landfill: A landfill that is not connected by road to a Class I landfill or a landfill that is located at least 50 miles from a Class I landfill. Class III landfills can accept no more than an average of one ton daily of ash from incinerated municipal solid waste or less than five tons daily of municipal solid waste.

Transfer station: A facility for the temporary deposition of some wastes. Transfer stations are often used as places where local waste collection vehicles will deposit their waste cargo prior to loading into larger vehicles. These larger vehicles will transport the waste to the end point of disposal or treatment.

REGULATORY FRAMEWORK

FEDERAL
Resource Conservation and Recovery Act
The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. After several amendments, the current Act governs the management of solid and hazardous waste and underground storage tanks (USTs). RCRA was an amendment to the Solid Waste Disposal Act of 1965. RCRA has been amended several times, most significantly by the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA is a combination of the first solid waste statutes and all subsequent amendments. RCRA authorizes the Environmental Protection Agency (EPA) to regulate waste management activities. RCRA authorizes states to develop and enforce their own waste management programs, in lieu of the Federal program, if a state's waste management program is substantially equivalent to, consistent with, and no less stringent than the Federal program.

STATE
California Integrated Waste Management Act (AB 939 and SB 1322)
The California Integrated Waste Management Act of 1989 (AB 939 and SB 1322) requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25% by 1995 and 50% by 2000. The purpose of AB 939 and SB 1322 is to “reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible.” The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid
waste stream with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows: Source Reduction; Recycling; Composting; Transformation; and Disposal.

**California Integrated Waste Management Board Model Ordinance**

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a “model ordinance” relating to adequate areas for collecting and loading recyclable materials in development projects. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include “adequate, accessible, and convenient areas for collecting and loading recyclable materials.” For subdivisions of single family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision.

**LOCAL**

**Milpitas Municipal Code, Chapter 200: Solid Waste Management**

Chapter 200 of the Milpitas Municipal Code contains specific requirements related to:

- Keeping or accumulating solid waste,
- Collection and disposal,
- Authorized contractors,
- Manner of collection, removal, and transportation,
- Solid waste disposal,
- Enforcement and penalties, and
- Disaster operations

**Milpitas Source Reduction and Recycling Element**

Adopted in 1991, the Milpitas Source Reduction and Recycling Element (SRRE) provides a summary and analysis of existing and needed source reduction, recycling, and composting programs and facilities, strategies for handling special wastes, and for funding. Implementation measures for both short (next 5 years) and medium term (next 10 years) are specified and include multifamily residential and non-residential recycling, public awareness, and regulatory programs. Implementation measures outlined in the Element are expected to lead to diversion of an estimated 13.6 to 19.5 percent of the waste stream by 2000.

Goals adopted as part of the City's *Source Reduction and Recycling Element* include:

- Meet or exceed state-mandated solid waste disposition rates by maximizing source reduction, recycling and composting opportunities for Milpitas residents and businesses;
- Motivate the residential and business sectors to reduce and recycle solid waste;
- Ensure that all land development projects provide adequate space and design for waste reduction and management activities and equipment;
• Encourage the development and expansion of local and regional markets for diverted materials;
• Provide solid waste management services that minimize environmental impacts, ensure public health and safety and facilitate waste reduction efforts; and
• Increase residents' awareness of proper disposal and reduction methods for wastes.

City of Milpitas General Plan
The existing Milpitas General Plan includes the following goals and policies related to solid waste:

Open Space & Environmental Conservation Element
4.h-G-1: Undertake efforts to reduce the generation of waste, increase recycling and slow the filling of local and regional landfills, in accord with the California Integrated Waste Management Act of 1989.

4.h-I-1: Implement measures specified in the City's Source Reduction and Recycling Element and the City's Household Hazardous Waste Element.

Waste Collection Services
The City of Milpitas has a franchise agreement for solid waste services with Republic Services (formerly Allied Waste). Waste from the City is hauled to the Newby Island solid waste disposal facility, which is located within Milpitas. In FY 2015, Milpitas disposed of 69,782.95 tons of solid waste. Milpitas offers green waste and yard trimming disposal and recycling of mixed paper, bottles, cans and other recyclable materials. In 2015, the City’s number of pounds of solid waste disposed per person per day was 5.3 for its general population, meeting the state’s goal for the community of 6.2 pounds. The pounds of solid waste per person per day for employees in the community was 8.4, meeting the state’s goal for the community of 9.7 pounds.

Waste Disposal Facilities
Newby Island Landfill
The Newby Island Landfill is a Class III Landfill which opened in 1938. The facility accepts municipal solid waste, construction/demolition waste, industrial waste, sludge, tires, green materials, and contaminated soils. Newby Island Landfill is open to the public.

Newby Island Landfill covers 342 acres of land; 298 acres are permitted for disposal. The landfill’s permit allows up to 4,000 tons of waste per day to be managed at the facility. According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Facility Permit (43-AN-0003), as of December 2014, the remaining capacity of the landfill’s disposal area is estimated at 57.5 million cubic yards, and the estimated closing date for the landfill is 2041. The Landfill is located next to Milpitas in the City of San Jose, and is a major source of odor in Milpitas.

Hazardous Waste Disposal
Household hazardous waste generated in Milpitas can be taken to a household hazardous waste drop-off event sponsored by Santa Clara County Integrated Waste Management. Santa Clara County Integrated Waste Management contains a list of various approved drop-off locations for electronic waste, automotive batteries, tires and antifreeze, other batteries, used automobile oil, fluorescent bulbs, medication, paint, sharp waste, and thermostats. The Household Hazardous Waste Program is funded by participating cities and the County of Santa Clara. These household hazardous waste drop-off events are
free for residents to use. State regulations limit the transportation of household hazardous waste to 15 gallons or 125 pounds per vehicle per visit.

**Solid Waste Generation Rates and Volumes**

CalRecycle tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the City of Milpitas between 2010 and 2015 are shown in Table 3.1-6.

As shown in the table, the total annual disposal tonnage in Milpitas has been generally trending upward from 2010 and 2015.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Waste Generation Rate (LBS/PERSON/DAY)</th>
<th>Total Disposal Tonnage (TONS/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4.4</td>
<td>52,973</td>
</tr>
<tr>
<td>2011</td>
<td>4.2</td>
<td>52,309</td>
</tr>
<tr>
<td>2012</td>
<td>4.5</td>
<td>54,907</td>
</tr>
<tr>
<td>2013</td>
<td>5.0</td>
<td>62,179</td>
</tr>
<tr>
<td>2014</td>
<td>4.9</td>
<td>62,883</td>
</tr>
<tr>
<td>2015</td>
<td>5.3</td>
<td>69,783</td>
</tr>
</tbody>
</table>


As shown in the table above, the per capita waste generation rate increased from 2010 to 2015, and peaked in 2015. The total annual disposal tonnage in Milpitas has been trending upward from 2010 through 2015. The City of Milpitas has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City’s 2015 per capita disposal rates are 5.3 and 8.4 pounds per person per day for residents and employees, respectively. The City’s per capita disposal rate is below the target rate of 6.2 for residents, and 9.7 for employees established by CalRecycle.
REFERENCES


3.1.5 Electricity and Natural Gas

Regulatory Framework

State

Public Utilities Commission

The California Public Utilities Commission (PUC) is the primary State agency that regulates privately owned public utilities in California. These utilities include telecommunications, electricity, natural gas, water, railroad, rail transit, and passenger transportation companies. A primary role of the PUC is to authorize utility rate changes. It also establishes service standards and safety rules, monitors the safety of utility and transportation operations, prosecutes unlawful marketing and billing activities, and oversees the merger and restructure of utility corporations.

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20% of its biofuels within California by 2010, 40% by 2020, and 75% by 2050. The executive order also calls for the State to meet a target for use of biomass electricity, including biomass cogeneration facilities.

Senate Bill 14 and Assembly Bill 64

Prior to the passage of SB 14 and AB 64 in 2009, California law required investor-owned utilities (IOUs) and energy service providers (ESPs) to increase their existing purchases of renewable energy by 1% of sales per year such that 20% of their retail sales, as measured by usage, are procured from eligible renewable resources (including biomass cogeneration) by December 31, 2010. This is known as the Renewable Portfolio Standard (RPS).

SB 14 and AB 64 require IOUs, POUs, and ESPs to increase their purchases of renewable energy such that at least 33% of retail sales are procured from renewable energy resources by December 31, 2020. For IOUs and ESPs, this is required only if the PUC determines that achieving these targets will result in just and reasonable rates.

Title 24

Title 24, Part 6, of the California Code of Regulations is also known as California’s Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2008 Energy Efficiency Standards went into effect on January 1, 2010. Title 24, Part 11, of the California Code of Regulations establishes the California Green Building Standards Code (CalGreen). Initially, the code requirements were voluntary; however, CalGreen became mandatory in 2011. CalGreen addresses five areas of green building: 1) planning and design, 2) energy efficiency, 3) water efficiency and conservation, 4) material conservation and resources efficiency, and 5) environmental quality. The mandatory requirements are separated into non-residential and residential projects. CalGreen also includes two optional tiers: Tier 1 and Tier 2. The tiers employ higher thresholds that jurisdictions may adopt or that projects may meet voluntarily.
3.0 UTILITIES AND COMMUNITY SERVICES

EXISTING SETTING

The Pacific Gas and Electric Company (PG&E) provides electrical and natural gas service to residences and businesses throughout the City of Milpitas. As a privately owned public utility, PG&E has a service area that covers most of northern and central California. PG&E generates electric power from many sources, including hydroelectric powerhouses, a nuclear power plant (Diablo Canyon), and a few small fossil-fired power plants. PG&E also purchases power from independent power producers; generation sources from these producers can range from large fossil power plants to smaller renewable and cogeneration plants. After the power is produced or bought, it goes into PG&E’s electric transmission and distribution systems to get to the homes and businesses of PG&E’s customers.

Infrastructure to deliver electricity and natural gas throughout Milpitas is currently in place. PG&E generally can provide these services to newer development on request.
3.0 Utilities and Community Services

References


Figure 3.1-1: Water System

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Figure 3.1-2: Sanitary Sewer System

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Figure 3.1-4: Storm Water System

Legend
- Pump Station
- Stormwater Conveyance System
- Main Pipe
- Drainage Channel
- Detention Basin
- Abandoned
- Other Features
  - Creek
  - City Boundary

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3.2 PUBLIC SAFETY

This section addresses the provision of public safety services in the City of Milpitas, including fire protection, law enforcement, and other local safety provisions.

3.2.1 FIRE PROTECTION

The City of Milpitas receives fire protection from the Milpitas Fire Department.

REGULATORY FRAMEWORK

STATE

California Occupational Safety and Health Administration

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all fire fighting and emergency medical equipment.

Office of Emergency Services

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

LOCAL

City of Milpitas General Plan

The existing Milpitas General Plan includes the following goals and policies related to fire protection:

Seismic and Safety Element

5.c-G-1 Provide high quality, effective and efficient fire protection services for the Milpitas area residents.

5.c-I-1 Maintain a response time of four minutes or less for all urban service areas.

5.c-I-2 Maintain mutual aid agreements with other agencies in the County.

5.c-I-3 Require automatic fire sprinklers for all new development in the Hillside Area that is not within 1.5 miles of an existing or planned fire station, and fire-resistant construction and compliance with California high-rise building requirement for buildings over three stories in height.

FIRE PROTECTION SERVICES

The Milpitas Fire Department is responsible for fire suppression, emergency medical services, rescue services, hazardous and toxic materials emergency response, coordination of City-wide disaster response efforts, enforcement of fire and life safety codes, enforcement of State and Federal hazardous materials regulations, and investigation of fire cause, arson and other emergency events for cause and origin.
Office of Emergency Services
The Milpitas Fire Department Office of Emergency Services (OES) coordinates the City’s preparedness efforts to mitigate against, plan for, respond to and recover from natural and technological disasters. To meet this commitment, the OES:

- Trains City employees in disaster planning
- Keeps the City’s multi-hazard emergency plan current
- Keeps the Emergency Operation Center in a state of readiness
- Manages S.A.F.E., the City’s Community Emergency Response Team program
- Supports ARES/RACES, the Amateur Radio auxiliary communications service
- Provides disaster preparedness information to residents and local businesses
- Works closely with the Milpitas Unified School District
- Organizes disaster recovery and relief efforts in cooperation with State OES and the Federal Emergency Management Agency
- Cooperates closely with Santa Clara County OES, all other cities in the County and special districts including the County’s flood management agency, the Santa Clara Valley Water District.

Bureau of Fire Prevention
The Milpitas Fire Department Bureau of Prevention has the responsibility and authority to enter, investigate, and perform routine fire inspections of all buildings, structures, and properties in the City with the exception single and multi-family dwellings in which the owner of the property resides.

The Bureau of Fire Prevention is staffed with eleven (11) full time employees; the Fire Marshal, Assistant Fire Marshal, two (2) Plan Check Engineers, two (2) Fire Prevention Inspectors, three (3) Hazardous Materials Inspectors, and (1) Public Education Lieutenant.

The Bureau’s primary responsibility is enforcement of the Uniform Fire Code and other local fire safety regulations. This includes the inspection of all Life Hazard Use Properties (i.e., gas stations, schools, nursing homes, daycare facilities, auto repair/auto body shops, places of assembly, and large retail operations) and the inspection of Non-Life Hazard businesses, offices, and multi-family residences.

Each fire protection district earns a rating from the Insurance Service Office (ISO). This rating, known as a Public Protection Classification (PPC), is utilized by many insurance providers to calculate insurance premiums within the district. Ratings range from 1 to 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area’s fire-suppression program does not meet ISO’s minimum criteria.

The PPC ratings are calculated on the following factors:

- Fire alarm and communication systems, including telephone systems, telephone lines, staffing, and dispatching systems;
• The fire department, including equipment, staffing, training, and geographic distribution of fire companies; and,

• The water-supply system, including the condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

Within the Milpitas city limits, the Milpitas Fire Department had an Insurance Service Office (ISO) rating of three (3) in 2011.

**FIRE STATIONS**

The Milpitas Fire Department operates four fire stations within its service area, as shown on Figure 3.2-1. Station 1 is located at 777 South Main Street, Station 2 is located at 1263 Yosemite Drive, Station 3 is located at 45 Midwick Drive, and Station 4 is located at 775 Barber Lane.

The Milpitas Fire Department Average response time as indicated in the 2015 Milpitas City Report was 4 minutes, 20 seconds, which is slightly over the City’s response goal of 4 minutes. In FY 2014, total City fire department staffing included 60 FTE employees (Santa Clara County LAFCO Cities Service Review 2015).

**REFERENCES**


3.2.2 Law Enforcement

The Milpitas Police Department provides law enforcement and police protection services throughout the city.

Police Protection Services

Established in 1954, the Milpitas Police Department is a full service law enforcement agency that is charged with the enforcement of local, State, and Federal laws, and with providing 24-hour protection of the lives and property of the public. The Police Department functions both as an instrument of public service and as a tool for the distribution of information, guidance, and direction. Figure 3.2-1 shows the locations of the Milpitas Police Department, located at 1275 N. Milpitas Boulevard.

The City of Milpitas employs City staff for police and dispatch services. The City contains one police station. In total, there are 87 sworn officers in the Police Department, and 39.6 full time support personnel (dispatchers, clerks, evidence technicians, administrative assistants, and crossing guards. The City reports that response time for Priority One calls averaged 2 minutes and 33 seconds. The City's goal for response time for Priority One calls is 3 minutes.

In 2015, the Milpitas Police Department handled 77,223 events/calls for service, made 2,442 arrests, issued 6,421 traffic citations, investigated 826 traffic collisions, and conducted 2,054 investigations of Priority 1 criminal offenses (murder, rape, robbery, assault, burglary, theft, motor vehicle theft, and arson.2

In FY 2014, total City expenditures on this function were $22,069,962. Approximately 35% of the City’s General Fund is dedicated to law enforcement. The City provides some specialized law enforcement services, including a computer aided dispatch system, a records management system and a gun range. The City also assigns certain police officers to participate on County enforcement task forces. There are some concerns that the opening of a new BART station in 2018 may be correlated to additional crime. The potential for increased crime rates coupled with state policy changes, namely prison realignment, have put additional pressure on Milpitas’s law enforcement.

Neighborhood Watch Program

Neighborhood Watch is a community-law enforcement partnership and crime prevention program. Through this partnership, Milpitas residents learn how to improve their safety, the security of their property, and foster new relationships with their neighbors and members of the Milpitas Police Department. The Milpitas Neighborhood Watch Program joins the Milpitas Police Department and neighborhood residents in an effort to combat crime.

The Neighborhood Watch Program is monitored by the Police Community Relations Unit and regular meetings can be held in your neighborhood to discuss issues on home security, recognizing and reporting suspicious activity, personal safety, and problems specific to your own neighborhood. The Neighborhood Watch newsletter is an additional means of communication between the Police Department and the citizens. It is the goal of the Neighborhood Watch Program to empower the community, enhance personal and residential safety, maintain open lines of communication with the Police Department, and improve the quality of life in the City of Milpitas.

1 Personal communication with Henry Kwong, Milpitas Police Department Lieutenant. July 25, 2016.
2 Ibid.
CRIMES BY CATEGORY IN MILPITAS

Statistics on the number of crimes by category of crime in Milpitas during each year from 2009 to 2014, as reported by the Federal Bureau of Investigation (FBI) Criminal Justice Information Services Division, are shown in Table 3.2-1 below.

<table>
<thead>
<tr>
<th>TABLE 3.2-1: CRIMES BY CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td><strong>Violent Crimes</strong></td>
</tr>
<tr>
<td>Homicide</td>
</tr>
<tr>
<td>Forcible Rape</td>
</tr>
<tr>
<td>Robbery</td>
</tr>
<tr>
<td>Aggravated Assault</td>
</tr>
<tr>
<td><strong>Property Crimes</strong></td>
</tr>
<tr>
<td>Burglary</td>
</tr>
<tr>
<td>Larceny-Theft</td>
</tr>
<tr>
<td>Vehicle Theft</td>
</tr>
<tr>
<td>Arson</td>
</tr>
</tbody>
</table>


As shown in the table, the majority of crimes committed in Milpitas consist of non-violent property crimes, primarily larceny-theft. Between 2009 and 2014, there were seven homicides reported in Milpitas.

POLICE RESPONSE TIMES

Response times are an important benchmark of police service. Response times can vary greatly depending on the size of the city and department, geographical location, and levels of crime. Smaller cities usually have faster response times, due simply to the geography. Calls for service are prioritized into two general categories.

- Priority 1 calls involve an immediate threat to life or crimes that are in progress.
- Priority 2 calls are high priority but do not elevate to the level of an emergency.

The Police Department manages the City’s Public Safety Answering Point (PSAP), which also provides Police, Fire, Crossing Guard and Public Works dispatching. In 2015, the PSAP answered 22,525 9-1-1 calls. In 2015, the average officer response time for in-progress emergencies (Priority 1 calls) was 2 minutes 44 seconds. The average officer response time for ‘urgent’ responses (Priority 2 calls) was 5 minutes 22 seconds.3

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3 Personal communication with Henry Kwong, Milpitas Police Department Lieutenant. July 28, 2016.
3.0 UTILITIES AND COMMUNITY SERVICES

REFERENCES


Federal Bureau of Investigation. 2009. Table 8, California, Offenses Known to Law Enforcement, by City.

Federal Bureau of Investigation. 2010. Table 8, California, Offenses Known to Law Enforcement, by City.

Federal Bureau of Investigation. 2011. Table 8, California, Offenses Known to Law Enforcement, by City.

Federal Bureau of Investigation. 2012. Table 8, California, Offenses Known to Law Enforcement, by City.

Federal Bureau of Investigation. 2013. Table 8, California, Offenses Known to Law Enforcement, by City.

Federal Bureau of Investigation. 2014. Table 8, California, Offenses Known to Law Enforcement, by City.


Personal communication with Henry Kwong, Milpitas Police Department Lieutenant. July 25, 2016.

Personal communication with Henry Kwong, Milpitas Police Department Lieutenant. July 28, 2016.
3.2.3 Miscellaneous Public Safety

Milpitas Emergency Operations Plan

The purpose of the Milpitas Emergency Operations Plan (EOP) is to provide a blueprint for emergency management within the city. The goal of the plan is to reduce the loss of lives and property in the event of a disaster. The EOP identifies the city’s emergency planning, organization, and response policies and procedures. The EOP also addresses the integration and coordination within other governmental agencies that are required during an emergency.

The EOP is based on the functions and principles of the Standardized Emergency Management Systems (SEMS). The EOP addresses how the City will respond to extraordinary events or disasters, from preparation through recovery. A hazards analysis and probability matrix are also included in the EOP. The responsibilities of each department are identified in matrices, and are based on each identified hazard or threat. The development of departmental Standard Operating Procedures (SOPs) is discussed, including what each department will include in their SOPs.

The Milpitas City Council is responsible for reviewing the entire plan on an annual basis, and coordinating revisions to the plan as required. Records of revision to the plan will be maintained by Sean Simonson in the Milpitas Office of Emergency Services. The plan may be modified as a result of post-incident analyses and/or post-exercise critiques. It may be modified if responsibilities, procedures, laws, rules, or regulations pertaining to emergency management and operations change. Those agencies or departments having assigned responsibilities under this plan are obligated to inform Milpitas when changes need to be made.

The EOP addresses a wide spectrum of contingencies, ranging from relatively minor incidents to large-scale disasters, such as an earthquake. Some emergencies may be preceded by a buildup or warning period, providing sufficient time to warn the public and implement mitigation measures designed to reduce loss of life, property damage, and effects on the environment. Other emergencies may occur with little or no advance warning, thus requiring immediate activation of the EOP and efficient and coordinated mobilization and deployment of resources.

The City’s response to disasters is based on four phases:

1. Preparedness Phase;
2. Response Phase;
3. Recovery Phase; and
4. Prevention/Mitigation Phase.

During each phase, specific actions are taken to reduce and/or eliminate the threat of specific disaster situations. The following individuals, either acting as the Emergency Operations Center Director or on behalf of the Emergency Operations Center Director, or their appointed representatives are authorized to activate the Emergency Operations Center: City Manager, Police Chief, or Fire Chief. The Emergency Services Coordinator will determine the phase and initiate the appropriate level of alert for response agencies, including the activation of the Emergency Operations Center as required.
3.0 Utilities and Community Services

Multi-Jurisdictional Local Government Hazard Mitigation Plan for the San Francisco Bay Area

The Association of Bay Area Governments (ABAG) prepared and adopted a Local Hazards Mitigation Plan in 2005. The purpose of the Plan is to serve as a catalyst for a dialogue on public policies needed to mitigate the natural hazards that affect the San Francisco Bay Area. The overall strategy of the Plan is to utilize a multi-jurisdictional effort to maintain and enhance the disaster resistance of the region, and to fulfill the requirements of the Disaster Mitigation Act of 2000 for all local governments to develop and adopt this type of plan.

Community Emergency Response Team (CERT)

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

The CERT program in Milpitas presents citizens training with the facts about what to expect following a major disaster and also in life saving skills with emphasis on decision-making skills and rescuer safety. It organizes teams so that certified CERT members are an extension of first responder services offering immediate help to victims until professional services arrive. CERT includes education topics such as earthquake survival, fire prevention and suppression, search and rescue, disaster first aid, and general emergency preparedness. CERT courses and information on organizing neighborhood teams is available at the Milpitas public building and online at the City’s website.

References


CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.2-1.
Police and Fire Facilities

Police and Fire Stations
- Fire Station
- Police Station

Planning Areas
- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Altas;
Map date: September 9, 2016.
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3.0 Utilities and Community Services

3.3 Parks and Recreation
Parks, trails, and recreational facilities in the City of Milpitas are managed and maintained by Public Works Department.

Regulatory Framework

State

Quimby Act
The Quimby Act (California Government Code Section 66477) states that “the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map.” Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City has adopted park fees as allowed by the Quimby Act, as described in greater detail below.

Local

Milpitas Development Impact Fee Program
The City of Milpitas Development Impact Fee Program is outlined in Chapter 4, Fees for New Development, of the Municipal Code. The development impact fees are charged as a condition of development to defray all or a portion of the cost of public facilities and improvements. The cost of developing and administering the City’s development impact fee program may be included as a component of the established fees. The revenues raised by payment of each type of development impact fee is placed in a separate and special account and the fees are used to pay for the City’s future construction of facilities described in the fee resolution(s), or to reimburse the City for those listed facilities constructed by the City with funds advanced by the City from other sources.

Milpitas Bikeways Master Plan
The Bikeways Master Plan provides a broad vision, strategies, and actions for the improvements of bicycling in Milpitas. The Plan builds upon the City’s previous Bikeways Master Plan from 2002 that the City’s Bicycle Pedestrian Advisory Commission produced. The Master Plan categorizes the City’s bikeways into three groups: Bike Paths, Bike Lanes, and Bike Routes. The Bikeways Master Plan includes:

- Goals, objectives, and benchmarks for bicycling
- A review of existing bicycling conditions
- Descriptions of Relevant Local and Regional Plans and Polices related to Bicycling
- An analysis of bicycling needs
- Recommended Bicycling Projects, Cost Estimates, and Priorities for implementation
- Recommended Bicycling Programs
- Funding Sources for Bicycle Projects and Programs
- Design Guidelines with best practices for implementing bikeways
Milpitas Trails Master Plan
Adopted in 1997, the Trails Master Plan describes and maps the trail corridors recommended for inclusion in the General Plan. The Master Plan categorizes the City’s trails into four groups: Regional Trails, City Trails, Neighborhood Trails, and On-Street Connectors. The Plan also makes several recommendations to facilitate the implementation of the Plan, including: adoption of the Milpitas Trails Master Plan Report, incorporation of the findings into the Circulation Element of the General Plan and associated environmental clearance documents, include top priority trail projects in the Capital Improvement Program, develop a Berryessa Creek Trail funding strategy to identify external grant fund sources, and pursue external grant funds identified in the funding strategy.

City of Milpitas General Plan
The existing Milpitas General Plan includes the following goals and policies related to parks and recreation:

*Land Use Element*
2.a-G-5: A park-like setting will be created by a series of local parks, school sites, trails, and a greenway system laced throughout all living areas.

*Open Space & Environmental Conservation Element*
4.a-G-1 Provide a park and recreation system designed to serve the needs of all residents of the community.
4.a-G-2 Develop a diversified trail system along streamsides and other public rights of way to provide recreational opportunities and link facilities.
4.a-G-3 Cooperate with other agencies, such as the County and MUSD, to provide recreational opportunities to residents.
4.a-I-1 Provide 5 acres of neighborhood and community parks for every 1,000 residents outside of the Midtown Specific Plan Area, and 3.5 acres of special use parks for every 1,000 residents within the Midtown Specific Plan Area.
4.a-I-2 For areas outside the Midtown Specific Plan Area, require land dedication or in lieu fees equivalent to the 5 acre/1,000 resident standard, but allow credit for private open space for up to 2 acres/1,000 residents for private open space provided in accordance with the criteria specified in the Subdivision Regulations. For areas within Midtown, require land dedication or in lieu fees equivalent to the 3.5 acre/1,000 resident standard, but allow credit for private open space for up to 1.5 acres/1,000 residents for private open space provided in accordance with the criteria specified in the Subdivision Regulations.
4.a-I-3 Provide a system of hiking and riding trails and pathways connecting the Valley Floor Area to Ed Levin Park.
4.a-I-4 Explore the feasibility of a trail in the Hillside Area within the crestline zone of protection connecting Ed Levin County Park to Alum Rock Park.
4.a-I-5 Provide an extensive visually stimulating system of "people paths" by developing park chains along Coyote River and the Hetch Hetchy right-of-way.
4.a-I-6 Develop the Coyote River area in cooperation with the County Park and Recreation Commission in a linear park chain which would connect with the Coyote Park Chain in San Jose and provide a safe
3.0 Utilities and Community Services

mechanism for undertaking flood-control measures. The trails along Coyote Creek should be part of the San Francisco Bay Trail, a regional network of trails used by hikers and bicyclists.

4.a-I-7 Where feasible, provide new neighborhood and community parks adjacent to public schools for joint use.

4.a-I-8 Explore the feasibility of providing interpretive trails that tie in with the history of Higuero Adobe and Alviso Adobe.

4.a-I-9 Explore the feasibility of providing a performing/visual arts center, an historical museum and a gymnasium.

4.a-I-10 Implement the goals and objectives of the Park and Recreation Master Plan.

Types of Parks

Community parks: Community Parks typically contain regulation-size ball fields and courts, space for informal games and activities, picnic and gathering areas, children play areas and parking. The only existing community park, the 24.4 acre Sports Center, serves as a special-use facility because it contains sports fields and facilities.

Neighborhood parks: Neighborhood parks in the City fall into two categories: typical walk to parks that serve the immediate neighborhood, providing open space for informal play, and parks containing a community-use facility, such as a regulation size, prepared ball field. In addition to serving the immediate neighborhood, the latter category also draws people from the larger community, some of whom may drive to the facility.

Special-use parks: This category includes mini-parks, linear parks, creek trails, flood retention areas, Community Garden, Senior Center, Rancho Milpitas Middle School Ball field, and Community /Civic Center. Additional linear parks through the creek trail system will be developed within the Midtown and Transit Specific Plan areas with future residential development.

Urban parks: Urban parks are small facilities, generally less than one acre in size, which accommodate the daily recreation or passive needs of nearby residents. They typically can include children’s play areas, sitting areas, and limited green space, but are not large enough to contain sports fields.

Linear parks: Linear parks are narrow corridors of land that have been developed primarily as a trail system. Linear parks may also include other small scale facilities such as picnic tables and benches. Milpitas has taken advantage of the Hetch-Hetchy right-of-ways for the development of a linear park system.

Regional parks: Regional parks are generally larger than 100 acres in size and serve the entire City or the region. While regional parks can provide for varying degrees of recreation activity, a portion of the park is generally maintained in a rustic setting for passive recreation use. While a number of regional parks serve Milpitas residents, the Planning Area includes only one such facility, the Ed Levin County Park.

Private recreation facilities: Besides parks and recreation facilities listed above, private recreation facilities in the Planning Area include: Fitness for 10, 24-Hour Fitness, Fitness 19, USA Fitness, South Bay Athletic Cub, Golfland, Summitpointe Golf Course, and Spring Valley Golf Course. Newly developed residential communities contain private recreational facilities and amenities such as pools, community rooms, and playgrounds.
3.0 Utilities and Community Services

Trails

Trails are a key factor in the development of a city-wide green space network of parks, trails, open space, and recreation facilities. To develop a successful, safe, alternative means of transportation and recreation within the city, four major components/classifications of trails are included in the City’s Trails Master Plan. Trails managed and maintained by the City of Milpitas are shown on Figure 3.3-1.

Regional Trails are those routes identified in the Santa Clara County Trails Master Plan as having national, state or regional significance. In Milpitas these are the Coyote Creek Trail, the San Francisco Bay Trail and the Juan Bautista de Anza National Historic Trails (which share the same alignment in Milpitas), and the Bay Area Ridge Trail.

City Trails provide north-south and east-west cross-town routes and extend beyond the City limits to Fremont and San Jose. These trails provide recreation and transportation benefits by linking neighborhoods with employment centers, shopping districts, schools, and transit facilities. City Trails include the Berryessa Creek Trail, Calera Creek Trail, Hetch-Hetchy Trail, Penitencia Creek Trail, and Wrigley Creek/Union Pacific Railroad Trail.

Neighborhood Trails connect homes with schools and parks and provide pedestrian and bicycle access to local shops and markets. They include the Hillcrest Park/Ben Rogers Park Trail, McCarthy Ranch Jogging Trail and Par Course, Rancho Milpitas Middle School/Sinnott School Trail and the Yellowstone Park Trail.

On-Street Connectors consist of on-street bicycle lanes and routes that link segments of the off-street trail system where no other route is available. They include Calaveras Road, Yosemite Drive and North Park Victoria Drive.

Bikeways: Bikeways are routes used in conjunction with or adjacent to roadways. They can be an important component in commuter transportation development. The City’s Bikeways Master Plan defines three types of bikeways:

- Class I Bikeway: “Bike paths” provided within a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized. Caltrans standards require bike paths to have a minimum paved width of eight feet and be completely separated from a street.

- Class II Bikeway: “Bike lanes” provided within a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through traffic by motor vehicles or pedestrians prohibited, but with vehicle parking and cross flows by pedestrians and motorists permitted. Caltrans standards require bike lanes to be striped with a 6-inch solid white line that provides a minimum four-foot exclusive bicycle travel lane.

- Class III Bikeway: “Bike routes” provided within the street right-of-way designated by signs or permanent markings and shared with pedestrians or motorists. Caltrans standards require Class III routes to be marked with appropriate bike route signs.

City Parks

The City is the primary service provider for parks and recreation. The City has 31 parks and a total of approximately 147.25 park acres. In addition, 183 acres of open space owned by the City are publicly accessible. The City operates one community center, one sports center, one senior center, and three swimming pools.
A summary of existing City parks with notable amenities, including locations and acreages is provided in Table 3.3-1. The location of these parks is shown on Figure 3.3-2.

**Table 3.3-1: Existing Park Facilities**

<table>
<thead>
<tr>
<th>PARK</th>
<th>LOCATION</th>
<th>ACREAGE</th>
<th>FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pecot Park</td>
<td>Dixon / Conway</td>
<td>1.6</td>
<td>Adjacent to Hetch Hetchy Trail</td>
</tr>
<tr>
<td>Dixon Landing Park</td>
<td>Dixon Landing / Milmont</td>
<td>11.4</td>
<td>Restrooms, 9 picnic tables, 3 BBQs, basketball, tennis, and volleyball sport courts, play equipment, parking for 84 vehicles</td>
</tr>
<tr>
<td>Al Augustine Memorial Park</td>
<td>Cortez / Coelho</td>
<td>6.2</td>
<td>Restrooms, 10 picnic tables, 8 BBQs, volleyball sport court, play equipment</td>
</tr>
<tr>
<td>Higuera Adobe Park</td>
<td>Wessex / Park Victoria</td>
<td>5.5</td>
<td>Restrooms, 11 picnic tables, 4 BBQs, play equipment, parking for 20 vehicles</td>
</tr>
<tr>
<td>Sandalwood Park</td>
<td>Escuela / Russell</td>
<td>3.9</td>
<td>3 picnic tables, 3 BBQs, play equipment</td>
</tr>
<tr>
<td>Hall Memorial Park</td>
<td>LaHonda / Coyote</td>
<td>9.9</td>
<td>Restrooms, 3 picnic tables, 1 BBQ, tennis sport court, play equipment, parking for 18 vehicles</td>
</tr>
<tr>
<td>Strickroth Park</td>
<td>Martil / Gemma</td>
<td>5.7</td>
<td>2 picnic tables, 2 BBQs, play equipment, parking for 25 vehicles</td>
</tr>
<tr>
<td>Jones Memorial Park</td>
<td>Jacklin / Hillview</td>
<td>5.2</td>
<td>3 picnic tables, 2 BBQs, par course</td>
</tr>
<tr>
<td>Calle Oriente Mini-Park</td>
<td>Calle Oriente</td>
<td>0.3</td>
<td>3 picnic tables, 2 BBQs, 2 handball courts, play equipment</td>
</tr>
<tr>
<td>Hidden Lake Park</td>
<td>North Milpitas / Escuela</td>
<td>6.5</td>
<td>3 picnic tables, 2 BBQs, lake with ducks, parking for 5 vehicles</td>
</tr>
<tr>
<td>Gill Memorial Park</td>
<td>Paseo Refugio / Santa Rita</td>
<td>8.1</td>
<td>Restrooms, 8 picnic tables, 6 BBQs, basketball, handball, and tennis sport courts, play equipment, parking for 20 vehicles</td>
</tr>
<tr>
<td>Cardoza Park</td>
<td>Kennedy / Park Victoria</td>
<td>10.1</td>
<td>Restrooms, 23 picnic tables, 7 BBQs, baseball and volleyball sport court, 2 horseshoe pits, outdoor amphitheater</td>
</tr>
<tr>
<td>Starlite Park</td>
<td>Rudyard / Abbott</td>
<td>4.0</td>
<td>Restrooms, 6 picnic tables, 4 BBQs, horseshoe units, play equipment</td>
</tr>
<tr>
<td>Cerano Park</td>
<td>SanDisk / Murphy Ranch</td>
<td>1.8</td>
<td>Restrooms, 4 picnic tables, 2 BBQs, basketball and tennis sport courts, play structure, open grass area, parking for 6 vehicles, adjacent to Coyote Creek Trail</td>
</tr>
<tr>
<td>John McDermott Park</td>
<td>Alvarez / Abel</td>
<td>0.9</td>
<td>Restrooms, 3 picnic tables</td>
</tr>
<tr>
<td>Tom Evatt Park</td>
<td>Abel / Machado</td>
<td>5.4</td>
<td>8 picnic tables, 1 BBQ, basketball, tennis, and volleyball sport courts</td>
</tr>
<tr>
<td>O'Toole Elms Park</td>
<td>Abel / Curtis</td>
<td>1.5</td>
<td>6 picnic tables, 1 BBQ</td>
</tr>
<tr>
<td>Parc Metro West Park</td>
<td>Curtis</td>
<td>1.0</td>
<td>Benches, play equipment</td>
</tr>
<tr>
<td>Parc Metro Center Park</td>
<td>Curtis</td>
<td>0.6</td>
<td>Open grass area, picnic tables, benches</td>
</tr>
<tr>
<td>Parc Metro East Park</td>
<td>Curtis</td>
<td>2.0</td>
<td>Restrooms, 6 picnic tables, 6 BBQs</td>
</tr>
<tr>
<td>Pinewood Park</td>
<td>Lonetree / Starlite</td>
<td>9.8</td>
<td>Restrooms, 10 picnic tables, 3 BBQs, basketball and tennis sport courts, tot lot</td>
</tr>
<tr>
<td>Selwyn Park</td>
<td>Selwyn / Dempsey</td>
<td>0.25</td>
<td>2 picnic tables, 2 BBQs, parking for 10 vehicles</td>
</tr>
</tbody>
</table>
3.0 UTILITIES AND COMMUNITY SERVICES

<table>
<thead>
<tr>
<th>PARK</th>
<th>LOCATION</th>
<th>ACREAGE</th>
<th>FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alviso Adobe</td>
<td>Aviso Adobe / Piedmont</td>
<td>2.3</td>
<td>Restrooms, 8 picnic tables, 4 BBQs</td>
</tr>
<tr>
<td>Foothill Park</td>
<td>Roswell</td>
<td>4.0</td>
<td>Restrooms, 5 picnic tables, 3 BBQs, play equipment, parking for 20 vehicles</td>
</tr>
<tr>
<td>Creighton Park</td>
<td>Olympic / Park Victoria</td>
<td>5.0</td>
<td>10 picnic tables, 4 BBQs, play equipment</td>
</tr>
<tr>
<td>Murphy Park</td>
<td>Yellowstone</td>
<td>8.7</td>
<td>Restrooms, 6 picnic tables, 3 BBQs, volleyball sport court, play equipment, parking for 18 vehicles</td>
</tr>
<tr>
<td>Robert E. Browne Park</td>
<td>Yellowstone / South Park Victoria</td>
<td>4.9</td>
<td>4 lighted tennis sport courts, par course</td>
</tr>
<tr>
<td>Ben Rogers Park</td>
<td>Grand Teton / Sequoia</td>
<td>9.5</td>
<td>8 picnic tables, 5 BBQs, backstop, play equipment, parking for 30 vehicles</td>
</tr>
<tr>
<td>Sinnott Park</td>
<td>Clear Lake / Tahoe</td>
<td>4.7</td>
<td>Restrooms, 3 picnic tables, 3 BBQs, volleyball sport court, play equipment, parking for 30 vehicles</td>
</tr>
<tr>
<td>Hillcrest Park</td>
<td>Fieldcrest / Crescent</td>
<td>5.2</td>
<td>9 picnic tables, 9 BBQs, tot lot</td>
</tr>
<tr>
<td>Dog Park at Ed Levin</td>
<td>Calaveras / Spring Valley</td>
<td>1.3</td>
<td>Picnic area, off-leash small and large dog park</td>
</tr>
</tbody>
</table>

| Total                     | 147.25                    |         |                                                                            |


The City’s 2015 population was approximately 77,604. With 147.25 acres of parkland, the City currently provides 1.90 acres of parkland for every 1,000 people, which falls below their goal of 5.0 park acres per 1,000 population for neighborhood parks.

However, owned and maintained by the County of Santa Clara Parks and Recreation Department Ed R. Levin County Park, is a unique regional park and recreation area within the eastern hills of Milpitas. This 1,558 acre park combines the traditional features of an urban park such as picnicking, fishing and play areas, with the complex trail system of many regional wilderness parks. Ed R. Levin’s expansive lawn areas, grasslands, and Oak woodlands are available to visitors looking for a back-to-nature experience. The park’s Monument Peak provides a view of the valley floor and the San Francisco Bay. Also featured at the park is an expansive off-leash dog park for large and small dogs. Owned and operated by the City of Milpitas this dog park is one of the most popular features in Ed R. Levin County Park.

JOINT USE FACILITIES

Milpitas Unified School District (MUSD) and San Jose Evergreen Community College District (SJECCD) intend to construct and operate a joint-use 21st century education center at Russell Middle School, with construction to be financed by SJECCD and jointly operated by the parties for the purpose of offering college educational support to the entire Milpitas community. A Memorandum of Understanding (MOU) was signed by the MUSD and SJECCD boards on November 13, 2012 as a guiding document for the Parties with regard to the development of the Joint Use Center and the potential construction, organizational and operational responsibilities of the Parties.

Additionally, the City has a joint-use agreement with the MUSD that allows mutual use of facilities at a reduced rental rate.
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REFERENCES


Figure 3.3-1. Trail System

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Altas; Milpitas Trails Master Plan. Figure 1. Map date: June 29, 2016.
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Figure 3.3-2. Parks within the City of Milpitas

<table>
<thead>
<tr>
<th>Park Name</th>
<th>Label</th>
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<tbody>
<tr>
<td>Pecot Park</td>
<td>1</td>
</tr>
<tr>
<td>Dixon Landing Park</td>
<td>2</td>
</tr>
<tr>
<td>Al Agustine Park</td>
<td>3</td>
</tr>
<tr>
<td>Higuera Adobe Park</td>
<td>4</td>
</tr>
<tr>
<td>Sandalwood Park</td>
<td>5</td>
</tr>
<tr>
<td>Hall Memorial Park</td>
<td>6</td>
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<tr>
<td>Strickroth Park</td>
<td>7</td>
</tr>
<tr>
<td>Jones Memorial Park</td>
<td>8</td>
</tr>
<tr>
<td>Calle Oriente Mini-Park</td>
<td>9</td>
</tr>
<tr>
<td>Hidden Lake Park</td>
<td>10</td>
</tr>
<tr>
<td>Gill Memorial Park</td>
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</tr>
<tr>
<td>Cardoza Park</td>
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</tr>
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<td>Starlite Park</td>
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<tr>
<td>Cerano Park</td>
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</tr>
<tr>
<td>John McDermott Park</td>
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</tr>
<tr>
<td>Tom Bveatt Park</td>
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<tr>
<td>O'Toole Bveatt Park</td>
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<tr>
<td>Park Metro West Park</td>
<td>18</td>
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<tr>
<td>Park Metro Center Park</td>
<td>19</td>
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<tr>
<td>Park Metro East Park</td>
<td>20</td>
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<tr>
<td>Pinewood Park</td>
<td>21</td>
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<tr>
<td>Alviso Adobe Park</td>
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<tr>
<td>Foothill Park</td>
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<td>Alman Adobe</td>
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<td>Football Park</td>
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<td>Greighton Park</td>
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<tr>
<td>Meredy Park</td>
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<tr>
<td>Robert E Brown Park</td>
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</tr>
<tr>
<td>Ben Rogers Park</td>
<td>29</td>
</tr>
<tr>
<td>Sinnott Park</td>
<td>30</td>
</tr>
<tr>
<td>Helixest Park</td>
<td>31</td>
</tr>
</tbody>
</table>

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Altas. Map date: June 29, 2016.
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3.4 SCHOOLS, LIBRARIES, AND OTHER PUBLIC FACILITIES

REGULATORY FRAMEWORK

STATE

Leroy F. Greene School Facilities Act of 1998 (SB 50)
The “Leroy F. Greene School Facilities Act of 1998,” also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district’s authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as “Proposition 1A,” reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for State construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- **Level I** fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.

- **Level II** fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30% of the district’s bonding capacity (percentage is based on revenue sources for repayment), having at least 20% of the district’s teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50% plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

- **Level III** fees are outlined in Government Code Section 65995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of State funding.

The Kindergarten-University Public Education Facilities Bond Act of 2002 (Prop 47)
This act was approved by California voters in November 2002 and provides for a bond issue of $13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

California Department of Education
The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various
3.0 Utilities and Community Services

Changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by State regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

Local

City of Milpitas General Plan
The existing Milpitas General Plan includes the following goals and policies related to schools:

Land Use Element

2.a-G-5: A park-like setting will be created by a series of local parks, school sites, trails, and a greenway system laced throughout all living areas.

2.a-I-18: Create a park-like quality for all residential areas through the PUD process and the judicious siting of parks, schools and greenways throughout those areas.

2.a-I-33: Encourage the establishment of day care facilities consistent with State standards, including the issuance of use permits for large day care facilities where compatible with surrounding neighborhoods and commercial uses, particularly in public facilities such as community centers, churches, schools and in employment centers and large housing developments.

2.c-G-1: Provide adequate school facilities for the City's residents.

2.c-I-1: Continue working with MUSD, Berryessa Union High School District, and East Side Union School District in its update of the comprehensive facilities plan and to ensure adequate provision of school facilities.

2.c-I-2: Locate future school sites on the General Plan Diagram if and when any amendments to the Plan are made that would necessitate new schools.
2.c-I-3: Work with MUSD, Berryessa Union High School District, and East Side Union School District to monitor statutory changes and modify school fee when necessary to comply with statutory changes.

2.d-G-1: Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.

SCHOOLS

The City of Milpitas is served by the Milpitas Unified School District (K-6 elementary schools, 7-8 and 7-9 middle schools, and 9-12 and 10-12 high schools). Table 3.4-1 provides a summary of the public schools serving the city’s population.

Table 3.4-1: Public Schools Serving Milpitas

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Burnett Elementary</td>
<td>K-6</td>
<td>400 Fanyon Street</td>
<td>659</td>
</tr>
<tr>
<td>Curtner Elementary</td>
<td>K-6</td>
<td>275 Redwood Avenue</td>
<td>735</td>
</tr>
<tr>
<td>Pomeroy Elementary</td>
<td>K-6</td>
<td>1505 Escuela Parkway</td>
<td>749</td>
</tr>
<tr>
<td>Randall Elementary</td>
<td>K-6</td>
<td>1300 Edsel Drive</td>
<td>434</td>
</tr>
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<td>Rose Elementary</td>
<td>K-6</td>
<td>250 Roswell Drive</td>
<td>464</td>
</tr>
<tr>
<td>Sinnott Elementary</td>
<td>K-6</td>
<td>2025 Yellowstone Avenue</td>
<td>780</td>
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<tr>
<td>Spangler Elementary</td>
<td>K-6</td>
<td>140 N. Abbott Avenue</td>
<td>579</td>
</tr>
<tr>
<td>Weller Elementary</td>
<td>K-6</td>
<td>345 Boulder Street</td>
<td>438</td>
</tr>
<tr>
<td>Zanker Elementary</td>
<td>K-6</td>
<td>1584 Fallen Leaf Drive</td>
<td>663</td>
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Middle Schools

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<tr>
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<tbody>
<tr>
<td>Rancho Middle</td>
<td>7-8</td>
<td>1915 Yellowstone Avenue</td>
<td>714</td>
</tr>
<tr>
<td>Russell Middle</td>
<td>7-9</td>
<td>1500 Escuela Parkway</td>
<td>824</td>
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High Schools

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<tbody>
<tr>
<td>Calaveras Hills</td>
<td>9-12</td>
<td>1331 E. Calaveras Boulevard</td>
<td>3,105</td>
</tr>
<tr>
<td>Milpitas High</td>
<td>10-12</td>
<td>1285 Escuela Parkway</td>
<td>137</td>
</tr>
</tbody>
</table>


The Final Environmental Impact Report for a proposed elementary school, McCandless Drive Elementary School, was completed on January 14, 2016. The Milpitas Unified School District approved, passed, and adopted the McCandless Drive Elementary School Site on January 26, 2016 (Resolution No. 2016.19). The new elementary school is currently scheduled to be built in several phases on the 6.7 acre property. The first phase is anticipated to be completed in August 2018, with a capacity of 250 students. The construction of Phases 2 and 3 rely on the passage of a Bond Measure in 2018, and the scope of each phase will be determined in part by enrollment projections but is expected to serve approximately 800 students.

MILPITAS PUBLIC LIBRARY

The Milpitas Public Library is the only public library located in the City of Milpitas. The Milpitas Public Library is part of the Santa Clara County Library District system. This enables the relatively small Milpitas
3.0 Utilities and Community Services

Public Library to access all of the other libraries that are part of the Santa Clara County Library system to obtain information not found in the Milpitas Public Library, which has been requested by customers. The Milpitas Public Library is located at 160 N. Main Street. The library is open from 1 PM to 9 PM on Mondays through Wednesdays, 10 AM to 6 PM on Thursdays through Saturday, and on Sundays from noon to 6 PM. The library collection includes materials in both Spanish and English. It also offers a wide variety of media, including DVDs, CDs and audiobooks, as well as a large print collection. The library offers a number of programs for all ages, including storytimes for babies and toddlers.

MILPITAS COMMUNITY CENTER

The Milpitas Community Center is located at 457 E. Calaveras Boulevard and was built in 1982. The Center is a 24,000 square foot facility that houses a variety of recreation programs including Pre-K Enrichment, Center Stage Performing Arts, Volunteers, Cultural Arts and many youth and adult classes. In addition, reservations for Community Center rooms, the Jose Higuera Adobe Building, and parks throughout Milpitas can be made in person at the Community Center.

Reservations can be made up to a year in advance by Milpitas residents and up to 6 months in advance by non-residents. Park reservations must be made a minimum of 2 business days in advance. Rooms accommodating 25 to 300 people along with other amenities are also available.

The City of Milpitas offers a variety of art programs at the Community Center. The Milpitas Arts and Culture Grant Program (MACG) is a competitive grant program where both group and individuals can apply for funding. The Phantom Art Gallery is located in the Milpitas Community Center. Display space is available for artists to display their work, once approved by the Arts Commission. Center Stage Performing Arts is a youth theatre program for ages 8 to 18. Center Stage Performing Arts is the contracted youth theatre program for ages 8 and up. These young performers produce three shows throughout the year.

BARBARA LEE SENIOR CENTER

The Barbara Lee Senior Center is located at 40 North Milpitas Boulevard, adjacent to the Milpitas Community Center. The Senior Center offers many programs and activities, such as classes, trips, socials and a weekday lunch program, which are available to senior citizens 50 years and older.

The facility consists of a community room/auditorium, two game rooms (one for table games and one with pool and ping pong), three class rooms, an art room, an exercise/dance room, and a fitness center. The facility also has a lounge and coffee/snack bar area, and a Case Manager services area.

Memberships are good for one year from the date of purchase. Fees are $12 for Milpitas residents (two proofs of residency required) and $30 for non-residents. Membership includes discounts on certain activities and events and supplemental insurance while attending Senior Center programs.

MILPITAS SPORTS CENTER

The Milpitas Sports Center, located at 1325 E. Calaveras Boulevard, is a full service fitness center. The facility includes a 33-piece fitness center, 3 pools, a large gym, 2 aerobic studios, and locker rooms with showers. The Sports Center is equipped with stairmasters, treadmills, crosstrainers, upright bikes, recumbent bikes, free weights, and has certified personal trainers on staff. New members can take part in a “Fitness Orientation” to learn the proper use of the Fitness Center equipment.

Participants in high school may become a member with proof of a valid school I.D. Participants under the age of 18 must be accompanied by a parent/legal guardian for the duration of the program or workout.
In 2016 renovations were completed to the sports fields, and other facilities. The facilities pools had their interior surfaces recoated and the pool deck replaced in compliance with the Americans with Disabilities Act and to improve drainage. The City installed a new synthetic turf multi-purpose field for football and soccer as well as a smaller youth soccer field at the sports center. The project also entailed installing new stadium lighting, a loudspeaker system, a scoreboard, goal posts, fences and a decomposed granite walking path around the new fields. In addition, improvements were made to the bleachers. The sports center’s previous football field was repurposed to add an adult soccer field and two youth fields to the new football field.
REFERENCES


Santa Clara County Library District. 2016. Milpitas. Available at: https://www.sccl.org/Locations/Milpitas.