# 12 GLOBAL CLIMATE CHANGE

This chapter provides an evaluation of the potential greenhouse gas (GHG) effects of implementing the proposed City of Folsom 2035 General Plan (2035 General Plan). As established in the Notice of Preparation for the proposed 2035 General Plan (see Appendix A, *Notice of Preparation)*, urban development and other activities subject to the plan may result in adverse effects to the global climate.

The environmental setting in Section 12.1.1 includes a review of existing GHG sources and emissions potentially resulting from implementation of the 2035 General Plan, including existing conditions within the City of Folsom. The regulatory setting in Section 12.1.2 includes a review of existing regulations, requirements, plans, and policies applicable to GHG emissions and climate change.

The existing conditions related to GHG emissions and climate change in the City of Folsom were determined by conducting a GHG inventory for major GHG sources within the City. Potential impacts were determined by comparing potential activities to the existing environment, based on CEQA assessment criteria, and by considering the policies, regulations, and guidelines adopted by the City of Folsom and by federal and state resource agencies.

## 12.1 SETTING

The environmental and regulatory setting of the City of Folsom with respect to GHGs and climate change is described below for both the physical environment and the body of local, state, and federal policies and regulations with respect to climate change.

### 12.1.1 ENVIRONMENTAL SETTING

#### THE PHYSICAL SCIENTIFIC BASIS

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into the upper atmosphere is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride ($SF_6$). Human-caused emissions of these GHGs more than natural ambient concentrations are believed responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations, in combination with other anthropogenic factors (Intergovernmental Panel on Climate Change [IPCC] 2014: 3, 5).

Each GHG has a different capability of trapping heat in the atmosphere, known as its global warming potential (GWP), which is normalized relative to $CO_2$ and expressed in carbon dioxide equivalent ($CO_2e$). The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014: 3, 87). In general, the 100-year GWPs reported by IPCC are used to estimate GHG emissions. The GWPs used in the GHG emissions inventory (discussed below) are from IPCC Fourth Assessment Report (IPCC 2007). Based on this report, the GWP for $CH_4$ is 25 (so emissions of 1 metric ton (MT) of $CH_4$ are equivalent to emissions of 25 MT of $CO_2$, and the GWP for $N_2O$ is 298 (IPCC 2007).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more $CO_2$ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused $CO_2$ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused $CO_2$ emissions remain stored in the atmosphere (IPCC 2013: 467).

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known, but is enormous; and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts relative to the effects on climate are inherently cumulative.

## GREENHOUSE GAS EMISSION SOURCES

Emissions of GHGs are attributable in large part to human activities associated with the transportation, industrial/manufacturing, electricity generation, agricultural, residential, and commercial emissions sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial sector (California Air Resources Board [CARB] 2017). Emissions of $CO_2$ are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and the decomposition of waste in landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. $CO_2$ sinks or reservoirs are the two most common processes for removing $CO_2$ from the atmosphere. Sinks or reservoirs include vegetation and oceans. Vegetation and oceans absorb $CO_2$ through sequestration and dissolution ($CO_2$ dissolving in the water), respectively, and are the two most common $CO_2$ removal processes.

In 2009, the County of Sacramento published an integrated, county-wide GHG emissions inventory, which included emissions from both communitywide sources and municipal operations for the unincorporated portions of the County as well as each of the incorporated cities, including the City of Folsom. The baseline year for emissions reporting in that inventory was 2005.

As part of the 2035 General Plan, an integrated Climate Action Plan (CAP) was prepared, which updated the 2005 inventory. For this update of the City's GHG inventory, a baseline year of 2014

was used. In addition to quantifying communitywide (i.e., citywide) emissions (Community Inventory), a separate inventory for the City's municipal operations (Municipal Inventory) was prepared. The 2014 emissions inventory is used to characterize the existing conditions. Inventory methods and data collection tools have evolved since the 2005 inventory was completed, and the 2014 inventory provides a more recent snapshot of emissions in the City. The 2014 Community Inventory is summarized in Table 12-1 and Figure 12-1, and the 2014 Municipal Inventory is summarized in Table 12-2 and Figure 12-2, below. See Appendix G for a more detailed description of the 2014 GHG inventory methods and results.

**Table 12-1 City of Folsom Community Inventory by Sector (2014)**

| Emissions Sector | Emissions ($MTCO_2e$) | Percent of Total Emissions |
|---|---|---|
| On-Road Vehicles | 342,865 | 52 |
| Building Energy | 235,955 | 36 |
| High-GWP Gases | 34,708 | 5 |
| Off-Road Vehicles | 26,683 | 4 |
| Solid Waste | 13,073 | 2 |
| Wastewater (Process and conveyance) | 3,282 | <1 |
| Water-Related | 1,325 | <1 |
| **Total** | **657,892** | **100** |

*Modeled by Ascent Environmental, Inc. 2017.*

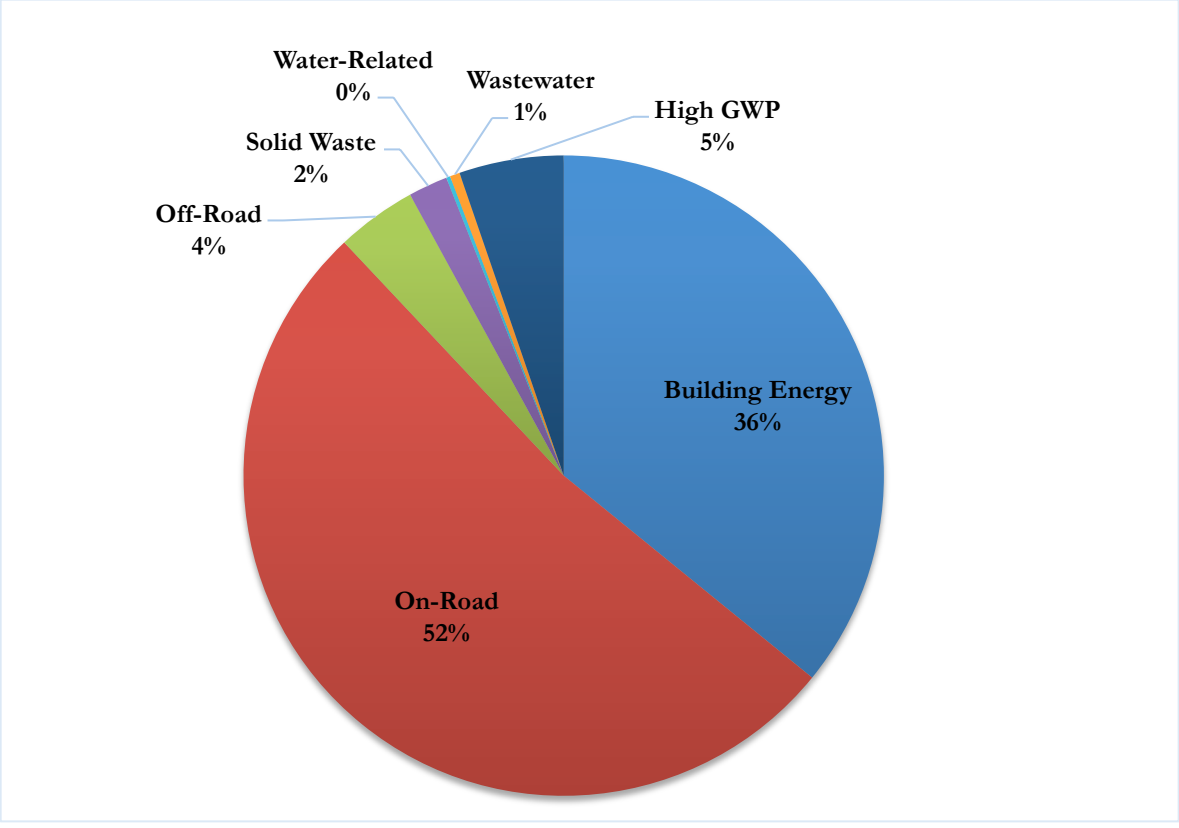


**Figure 12-1 City of Folsom Community Inventory by Sector**

**Table 12-2 City of Folsom Municipal Inventory by Sector (2014)**

| Emissions Sector | Emissions ($MTCO_2e$) | Percent of Total Emissions |
|---|---|---|
| On-Road Vehicles (employee commute and fleet) | 4,247 | 56 |
| Building Energy | 2,137 | 29 |
| Street Lights | 727 | 10 |
| Off-Road Vehicles | 138 | 2 |
| Traffic Signals | 101 | 1 |
| Solid Waste (portion attributed to City employees) | 71 | <1 |
| Water-Related | 33 | <1 |
| Wastewater (process and conveyance) | 15 | <1 |
| Total | 7,469 | 100 |

*Modeled by Ascent Environmental, Inc. 2017.*

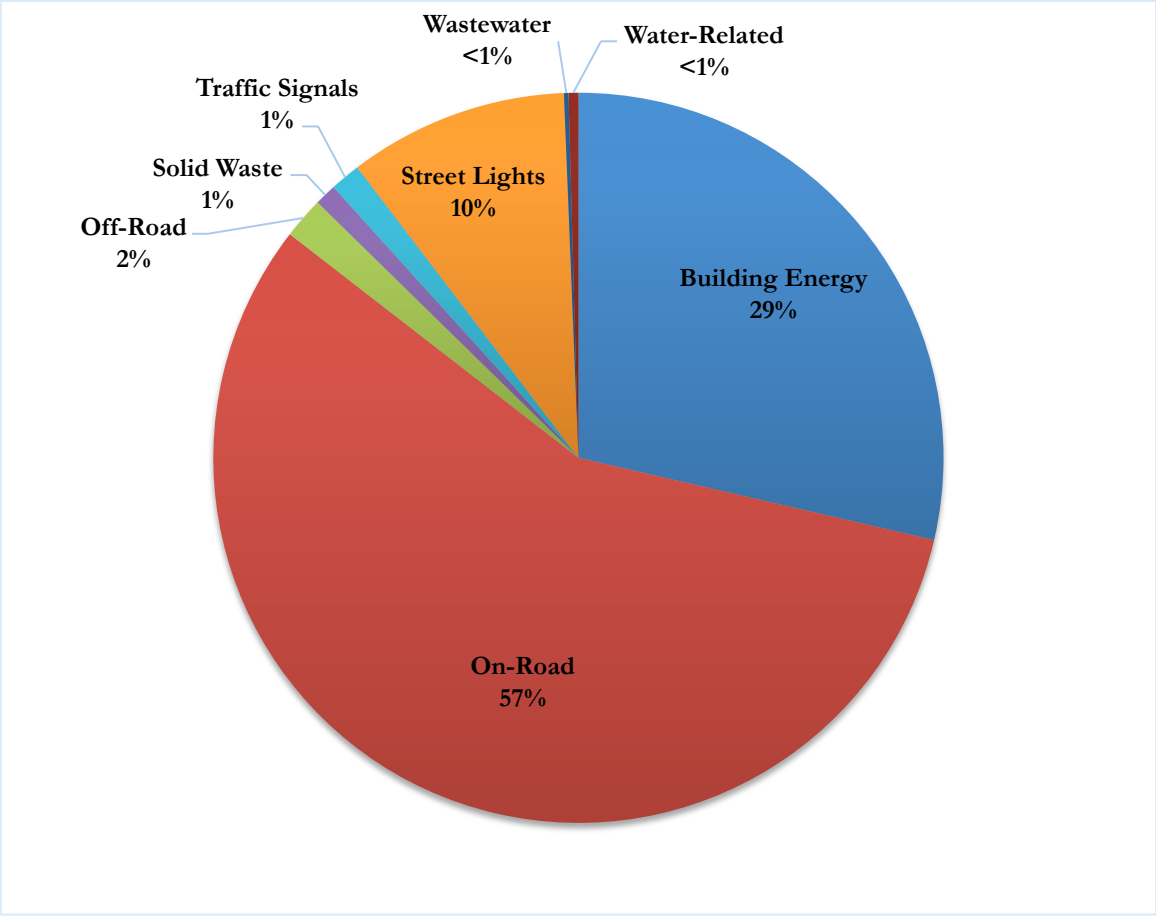


**Figure 12-2 City of Folsom Municipal Inventory by Sector**

## EFFECTS OF CLIMATE CHANGE ON THE ENVIRONMENT

The IPCC was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme to provide the world with a scientific view on climate change and its potential effects. According to the IPCC, global average temperature is expected to increase relative to the 1986-2005 period by 0.3 to 4.8 degrees Celsius (°C) (0.5-8.6 degrees Fahrenheit [°F]) by the end of the 21st century (2081-2100), depending on future GHG emission scenarios (IPCC 2014: SPM-8). According to the California Natural Resources Agency (CNRA), average temperatures in California are projected to increase 2.7°F above 2000 averages by 2050 and, depending on emission levels, 4.1–8.6°F by 2100 (CNRA 2012: 2).

Physical conditions beyond average temperatures could be indirectly affected by the accumulation of GHG emissions. For example, changes in weather patterns resulting from increases in global average temperature are expected to result in a decreased volume of precipitation falling as snow in California and an overall reduction in snowpack in the Sierra Nevada. Based upon historical data and modeling, the California Department of Water Resources projects that the Sierra snowpack will experience a 25-40 percent reduction from its historic average by 2050 (California Department of Water Resources 2008:4). An increase in precipitation falling as rain rather than snow also could lead to increased potential for floods because water that would normally be held in the Sierra Nevada until spring could flow into the Central Valley concurrently with winter storm events (CNRA 2012:5). This scenario would place more pressure on California's levee and flood control system.

In addition to being drought-prone, California is at risk of losing at least 25 percent of standing live forest or 12 percent of the total forested area because of insects and disease. Tree mortality is already prevalent throughout California. There is usually a lag time between drought years and tree mortality; however, there has been a sharp increase in tree mortality from the 2012 - 2016 drought (CARB 2017a: 10).

Another outcome of global climate change is sea level rise. Sea levels rose approximately seven inches during the last century and, if sea-level changes along the California coast continue to track global trends, sea level along the state's coastline in 2050 could be 10-18 inches higher than in 2000, and 31 to 55 inches higher by the end of this century (CNRA 2012: 9).

As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the state if suitable conditions are no longer available (CNRA 2012: 11, 12).

Changes in precipitation patterns and increased temperatures are expected to alter the distribution and character of natural vegetation and associated moisture content of plants and soils. An increase in frequency of extreme heat events and drought are also expected. These changes are expected to lead to increased frequency and intensity of large wildfires (CNRA 2012: 11).

Cal-Adapt is a planning tool developed by the California Energy Commission (CEC) to evaluate climate change influences, consistent with emissions scenarios identified in the IPCC Fifth Assessment Report (IPCC 2014). Emissions scenarios used in this discussion are the Representative Concentration Pathways (RCP) 4.5 and RCP 8.5 scenarios.

Annual average temperatures in Folsom are projected to increase steadily. According to Cal-Adapt, the city is projected to experience a temperature increase of 3.2°F (under the RCP 4.5 scenario) or a 3.5°F increase (under the RCP 8.5 scenario) by 2036 (Cal-Adapt 2017). Increased temperature is expected to lead to secondary climate change impacts, including increases in the frequency, intensity, and duration of extreme heat days and multiday heat waves/events in California.

## 12.1.2 REGULATORY SETTING

The following regulations of federal, state, and local agencies govern various aspects of climate change and GHG emissions. These regulations are summarized below and discussed in detail in Appendix C.

### FEDERAL LAWS AND REGULATIONS

#### *National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks*

On August 28, 2014, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) finalized a new national program that would reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the U.S. (NHTSA 2012). This program will increase fuel efficiency for the fleet of cars and light-duty trucks in the U.S.

### CALIFORNIA LAWS AND REGULATIONS

#### *Executive Order S-3-05*

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

#### *Assembly Bill 32, the California Global Warming Solutions Act of 2006*

Assembly Bill (AB) 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires reductions in statewide emissions to continue beyond 2020.

#### *Assembly Bill 32 Climate Change Scoping Plan*

In December 2008, CARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) of carbon dioxide-equivalent emissions, or approximately 21.7 percent from the State's projected 2020 emission level of 545 MMT $CO_2e$ under a business-as-usual scenario (this is a reduction of 47 MMT $CO_2e$, or almost 10 percent, from 2008 emissions).

In November 2017, CARB released California's 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update), which lays out the framework for achieving the 2030 reductions as established in more recent legislation in Senate Bill (SB) 32 (discussed below). The proposed 2017

Scoping Plan Update identifies the GHG reductions needed in each emissions sector to achieve a statewide emissions level that is 40 percent below 1990 levels by 2030.

### *Senate Bill 375*

SB 375, signed by Governor Schwarzenegger in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocation in each MPO's Regional Transportation Plan (RTP). CARB, in consultation with the MPOs, established regional GHG reduction targets in 2010 for GHGs emitted by passenger cars and light trucks for each MPO region in the State for 2020 and 2035. The SCS prepared for each region, and updated every four years concurrently with each RTP Update, must demonstrate how these targets will be achieved.

### *Executive Order B-30-15*

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014.

### *Senate Bill 32 and Assembly Bill 197 of 2016*

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

### *Advanced Clean Cars Program*

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions, and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. By 2025, when the rules will be fully implemented, all new cars and light-duty trucks sold in California will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions than the same vehicles sold in 2016 (CARB [no date]).

### *Senate Bill X1-2, the California Renewable Energy Resources Act of 2011, and Senate Bill 350*

SB X1-2 of 2011 requires all California energy utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. In October 2015, SB 350

was signed by Governor Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030.

### *California Building Efficiency Standards of 2016 (Title 24, Part 6)*

Buildings in California are required to comply with California's Energy Efficiency Standards for Residential and Nonresidential Buildings established by CEC regarding energy conservation standards and found in Title 24, Part 6 of the California Code of Regulations. All buildings for which an application for a building permit is submitted on or after January 1, 2017 must follow the 2016 standards (CEC 2015a). Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

### *California Integrated Waste Management Act*

The California Integrated Waste Management Act of 1989 (AB 939), effective January 1990, required all jurisdictions to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. In 2011, AB 341 modified the California Integrated Waste Management Act and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939.

## LOCAL LAWS AND REGULATIONS

Local laws and regulations include the City of Folsom Municipal Code, policies and guidance established by the Sacramento Metropolitan Air Quality Management District (SMAQMD), and project-level mitigation measures developed for projects in Folsom. These are discussed separately below.

### *Folsom Municipal Code*

Section 12.16.080 Street tree planning of the Folsom Municipal code requires that "Each applicant for a parcel map, subdivision map or planned development permit which seeks, in whole or in part, the improvement of real property shall be responsible for the planting of street trees. The species of trees to be planted shall be on the master tree list. As part of the application process, the planning director shall recommend to the approving authority the size of the tree to be planted, the location within the tree maintenance strip of the planting and the stage of the development at which the tree is to be planted. There shall be no fewer than one street tree for each single-family lot and two trees on corner lots for residential lots and not less than one tree per fifty feet of street frontage planted on center for commercial and industrial parcels. In multifamily developments, the number of trees shall be determined by the planning director, provided not more than one tree for each dwelling unit may be required.

### *Sacramento Metropolitan Air Quality Management District*

SMAQMD is the primary agency responsible for addressing air quality concerns in Sacramento County. SMAQMD also recommends measures for analyzing project-generated and plan-level GHGs in CEQA analyses and offers multiple potential GHG reduction measures for land use development projects and long-range plans such as general plans.

Chapter 9 Program-Level Analysis of General Plans and Area Plans of the SMAQMD CEQA Guide provides guidance on methods to evaluate climate change impacts of general plans being adopted or updated within Sacramento County pursuant to CEQA. In accordance with SMAQMD Guidance, program or plan- level analyses should quantify GHG emissions, draw a significance determination prior to mitigation, include a discussion of all feasible mitigation, and determine whether or not mitigation would reduce impacts to a less-than-significant level. Specifically, SMAQMD recommends methods and tools for quantifying GHG emissions including resources from the California Air Pollution Control Officers Associations (CAPCOA) and CARB. SMAQMD recommends preparing GHG emissions projections for 2020, 2030, 2050, and the projected year of the plan build-out. In addition, lead agencies that choose to adopt a Climate Action Plan (CAP) to reduce GHG emissions should do the following, in accordance with CEQA Guidelines 15183.5(b)(1):

- Quantify existing and projected (over a specified time period) GHG emissions for the defined area resulting from activities within that area;
- Identify and analyze GHG emissions resulting from specific actions or categories of actions anticipated in the defined area;
- Establish a level at which emissions of GHG from the defined area would not be cumulatively considerable, based on substantial evidence;
- Specify measures or groups of measures, if implemented on a project-by-project basis, that would collectively achieve the specified GHG emissions level, demonstrated by substantial evidence;
- Establish a monitoring mechanism for the Climate Action Plan's progress at achieving the GHG emissions level and require amendments to the plan if the plan is not achieving specified levels; and
- Adopt the Climate Action Plan in a public process following environmental review.

Further, for purposes of determining significance under CEQA for project-level analysis, SMAQMD developed thresholds of significance to provide a uniform scale to measure the significance of GHG emissions from land use and stationary source projects in compliance with CEQA and AB 32. SMAQMD's goals in developing GHG thresholds include ease of implementation; use of standard analysis tools; and emissions mitigation consistent with AB 32. However, since the passage of SB 32 and AB 197 and the associated adoption of a revised statewide emissions target of 40 percent below 1990 levels by 2030, SMAQMD has not developed new thresholds in compliance with this target. SMAQMD has not developed thresholds applicable to plan-level CEQA analyses.

### *Folsom Plan Area Specific Plan/Russell Ranch Adopted Mitigation Measures*

Mitigation measures adopted by the City during its approval of the Folsom Plan Area Specific Plan and the Russell Ranch project related to GHG emissions include:

**Folsom Plan Area Specific Plan EIR/EIS**

- Mitigation Measure 3A.4-1: Implement Additional Measures to Control Construction-Generated GHG Emissions.
- Mitigation Measure 3A.4-2a: Implement Additional Measures to Reduce Operational GHG Emissions.

- Mitigation Measure 3A.4-2b: Participate in and Implement an Urban and Community Forestry Program and/or Off-Site Tree Program to Off-Set Loss of On-Site Trees.

**Russell Ranch Project EIR and Initial Study**

- 3A.2-2 Implement All Measures Prescribed by the Air Quality Mitigation Plan (AQMP) to Reduce Operational Air Pollutant Emissions.

An AQMP was prepared for the projects that included numerous measures intended to improve air quality, which also result in GHG emissions reductions. Measures included project design to provide bicycle parking, integrated pedestrian/bicycle path network, transit stops with shelters, a prohibition against the use of wood-burning fireplaces, energy star roofing materials, electric lawnmowers, and onsite transportation alternatives to passenger vehicles. These measures reduce VMT and associated mobile-source GHG emissions as well as building energy use and GHGs associated with electricity generation and natural gas combustion. These measures only apply to the Folsom Plan Area Specific Plan and Russell Ranch projects, however, and do not address communitywide GHG emissions.

## 12.1.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following policies from the proposed 2035 General Plan address climate change and GHG emissions. Numerous policies within the 2035 General Plan address sustainable development, which influence operational mobile- and area-source emissions. Policies and Implementation Programs throughout the Land Use and Mobility elements promote reductions in vehicle miles traveled (VMT) through mix and density of land uses, walkable neighborhood design, bicycle facilities, public transportation facilities and infrastructure. Relevant goals and policies are included below.

### LAND USE ELEMENT

**Policy LU 1.1.6: Compact Development Patterns.** Encourage compact development patterns that support walking, bicycling, transit usage, and more efficient use of land.

**Policy LU 1.1.7: Concentrated Development.** Allow project applicants to concentrate the proposed development on a portion of the site through the clustering of buildings to encourage the preservation of open spaces, cultural resources, and natural features of the landscape.

**Policy LU 1.1.12: Infill Development.** Coordinate with the real estate development community to encourage infill development in key parcels north of U.S. Highway 50. Infill development should follow these guidelines:

1. *Respect the local context.* New development should improve the character and connectivity of the neighborhoods in which it occurs. Physical design should respond to the scale and features of the surrounding community, while improving critical elements such as transparency and permeability.
2. *Work with neighbors.* Infill development requires neighborhood consultation to understand the concerns, goals, and needs of existing neighborhoods. Ensure the planning and design process provides proper avenues for neighborhood input while fulfilling the community's larger goals for walkability and compact development. (New Policy)

**Policy LU 1.1.13: Sustainable Building Practices.** Promote and, where appropriate, require sustainable building practices (e.g., LEED certification) that incorporate a "whole system"

approach to designing and constructing buildings that consume less energy, water and other resources; facilitate natural ventilation; use daylight effectively; and, are healthy, safe, comfortable, and durable.

**Policy LU 1.1.14: Promote Resiliency.** Continue to collaborate with nonprofit organizations, neighborhoods groups, and other community organizations to promote the issues of air quality, food availability, renewable energy systems, sustainable land use and the reduction of GHG emissions.

**Goal LU 3.1:** Encourage mixed-use development projects that create vibrant, walkable districts.

**Policy LU 3.1.1: Mixed-Use Nodes.** Encourage mixed-use development in nodes located at major intersections that include housing, open space, and offices. This development pattern should reflect best practices in mixed-use development, in contrast to strip retail developments along corridors.

**Policy LU 3.1.5: East Bidwell Street.** Encourage new development along East Bidwell Street by creating a stronger mixed-use development pattern, both horizontal and vertical, with an emphasis on medium- and higher-density housing, while also addressing local and citywide demand for retail and services.

**Policy LU 3.1.6: Central Commercial District.** Encourage development of mixed-use projects that create a walkable, vibrant district along East Bidwell Street between Coloma Street and Blue Ravine Road.

**Goal LU 4.1:** Establish transit-supported mixed-use districts near rapid transit stations that support the needs of commuters, residents, employees, business-owners, and patrons.

**Policy LU 4.1.2: Mix of Uses Near Station.** Encourage new development around transit stations that mix retail with a variety of housing and employment options to transform Folsom stations into destinations that take advantage of public investment in transit.

**Policy LU 4.1.3: Maximize TOD-Related CEQA Streamlining Benefits.** Assist property owners and developers interested in building high-density housing and employment within SACOG Transit Priority Areas (i.e., ½ mile of light rail stations) to maximize CEQA streamlining benefits available through SACOG's MTP/SCS.

**Policy LU 4.1.4: Restrict Auto-Oriented Uses Around Transit Stations.** Restrict new auto-oriented uses (e.g., automobile repair, gas station, car wash) within one-quarter mile of light rail stations.

**Policy LU 4.1.5: Connections Between Modes.** Encourage transit transfer points to be located at rapid transit stops to facilitate connections between transit modes. In addition, the City should require stations to be pedestrian- and bicycle-friendly.

**Goal LU 6.1:** Allow for a variety of housing types and mix of uses that provide choices for Folsom residents, create complete and livable neighborhoods, and encourage walking and biking.

**Policy LU 6.1.1: Complete Neighborhoods.** Encourage the establishment of "complete neighborhoods" that integrate schools, childcare centers, parks, shopping and employment centers, and other amenities.

**Policy LU 6.1.3: Efficiency Through Density.** Support an overall increase in average residential densities in identified urban centers and mixed-use districts. Encourage new housing types to shift from lower-density, large-lot developments to higher-density, small-lot and multifamily developments, as a means to increase energy efficiency, conserve water, reduce waste, as well as increase access to services and amenities (e.g., open space) through an emphasis of mixed uses in these higher-density developments.

**Policy LU 6.1.10: Enhanced Walking and Biking.** Where volume-to-capacity analysis demonstrates that bike lanes and pedestrian improvements can be included in the public right-of-way, encourage opportunities to promote walking and biking in existing suburban neighborhoods through improvements such as:

- introducing new pedestrian and bicycle connections;
- adding bike lanes and designating and signing bike routes;
- narrowing streets where they are overly wide;
- introducing planting strips and street trees between the curb and sidewalk; or
- introducing appropriate traffic-calming improvements.

**Policy LU 8.1.5: Transit.** Encourage new employment uses to locate where they can be easily served by public transit. Transit centers should be incorporated into the project, when appropriate.

**Policy LU 9.1.3: Eliminate Large Blocks.** Encourage the insertion of new streets or pedestrian ways in large "super blocks" that do not have public streets bisecting them. These large blocks are common in retail corridors and can reduce pedestrian and bicycle connections to these areas.

**Policy LU 9.1.5: Pedestrian-Friendly Entrances.** Encourage automobile-oriented business districts to provide clear and legible entry features, connected by pedestrian-friendly walkways.

**Policy LU 9.1.8: Cool Paving.** Identify opportunities to use cool paving materials and consider the use of concrete instead of asphalt for streets and trails, where feasible.

**Policy LU 9.1.9: Passive Solar Access.** Ensure, to the extent feasible, that sites, subdivisions, landscaping, and buildings are configured and designed to maximize passive solar access.

**Policy LU 9.1.10: Renewable and Alternative Energy Generation Systems.** Require the use of solar, wind, or other on-site renewable energy generation systems as part of the design of new planned developments.

## MOBILITY ELEMENT

**Goal M 1.1:** Provide a comprehensive, integrated, and connected network of transportation facilities and services for all modes of travel that also incorporates emerging transportation technologies and services to increase transportation system efficiency.

**Policy M 1.1.1: Complete Streets.** Develop its streets to serve the needs of all users, including bicyclists, public transit users, children, seniors, persons with disabilities, pedestrians, motorists, and movers of commercial goods.

**Policy M 1.1.2: Adequate Rights-of-Way.** Ensure that all new roadway projects and major reconstruction projects provide appropriate and adequate rights-of-way for all users including bicyclists, pedestrians, transit riders, and motorists, except where pedestrians and bicyclists are prohibited by law from using a given facility. Dedication and improvements of full rights-of-way shall follow City design standards by roadway classification except in existing developed areas where the City determines that such improvements are either infeasible or undesirable. Other deviations from these standards shall be permitted upon a determination that safe and adequate access and circulation are preserved by such deviations.

**Policy M 1.1.4: Existing Streets Retrofits.** Actively pursue funding to update existing streets with new bikeways, sidewalks, and exclusive transit lanes, where these facilities are designated in the Bikeway Master Plan, Pedestrian Master Plan, or Transit Master Plan.

**Policy M 1.1.5: Connected Neighborhoods.** Require the continuation of the street network between adjacent development projects to promote walkability and allow easier access for emergency vehicles.

**Policy M 1.1.6: Intermodal Connections.** Provide connections between modes, including bicycle and pedestrian connections to transit stops, buses that can accommodate bicycles, and park-and-ride lots.

**Policy M 1.1.7: Transportation System Management.** Require a transportation system management (TSM) program that applies to existing as well as future development and will ensure the assumed reduction in peak hour vehicle trips.

**Policy M 1.1.8: Intelligent Transportation Systems (ITS) Master Plan.** Prepare and adopt an ITS Master Plan to prioritize the deployment of technology designed to maximize the efficiency of the City's traffic signal systems. Require that all development projects incorporate ITS infrastructure where feasible and consistent with the City's adopted ITS Master Plan.

**Policy M 1.1.9: Transportation Demand Management.** Develop a citywide Transportation Demand Management Program, which provides a menu of strategies and programs for developers and employers to reduce single-occupant vehicle travel in the city.

**Policy M 1.1.10: Facilities for Emerging Technologies.** Assist in the provision of support facilities such as advanced fueling stations (e.g., electric and hydrogen) for emerging technologies.

**Policy M 1.1.11: Historic Southern Pacific Rail Right-of-way.** Facilitate use of the Southern Pacific Rail right-of-way for multi-modal transportation.

**Goal M 2.1:** Maintain and expand facilities and programs that encourage people to walk and bike in safety and comfort, and support the lifestyle and amenities that Folsom residents value.

**Policy M 2.1.1: Pedestrian Master Plan.** Maintain and implement a pedestrian master plan that guides the development of a network that links residential developments with employment centers, public open spaces, parks, schools, shopping districts, and other major destinations.

**Policy M 2.1.2: New Sidewalks.** Sidewalks shall be built along all new arterial, collector, and local roads when ultimate street improvements are installed.

**Policy M 2.1.3: Pedestrian and Bicycle Linkages in New Development.** Require developers to provide a system of sidewalks, trails, and bikeways that link all land uses, provide accessibility to parks and schools, and connect to all existing or planned external street and trail facilities.

**Policy M 2.1.4: Sidewalk Network.** Strive to fill gaps in the city's existing sidewalk network.

**Policy M 2.1.5: Bikeway Master Plan.** Maintain and implement a bikeway master plan that guides the development of a network that links residential developments with employment centers, public open spaces, parks, schools, shopping districts, and other major destinations.

**Policy M 2.1.10: Bicycle Parking.** Require adequate short- and long-term bicycle parking for all land uses, except for single family and single-family high-density residential uses.

**Policy M 2.1.11: Bicycle Parking at City Facilities.** Provide bicycle parking at all City parks and public facilities (e.g., library, City Hall) sufficient to accommodate anticipated demand for spaces.

**Policy M 2.1.12: Trail Network.** Develop a continuous, interconnected system of trails and bikeways.

**Policy M 2.1.14: Intersections.** Ensure new intersections are designed to safely accommodate pedestrians and bicyclists, along with all other transportation modes.

**Policy M 2.1.17: Pedestrian and Bicycle Overpasses.** Pursue the development of pedestrian and bicycle overpasses in areas with limited connectivity, particularly to connect development north and south of Highway 50.

**Goal M 3.1:** Support and maintain a comprehensive, safe, and integrated transit system that responds to the needs of all residents and allow frequent and convenient travel throughout the city and region.

**Policy M 3.1.1: Access to Public Transit.** Strive to ensure that all residents have access to safe and convenient public transit options.

**Policy M 3.1.3: Regional Transit Connectivity.** Coordinate with Sacramento Regional Transit and neighboring jurisdictions on fixed route connectivity and transfers to improve the transit system.

**Policy M 3.1.4: Light Rail Double-Tracking.** Coordinate with Sacramento Regional Transit on possibilities for improving light rail headways through double-tracking.

**Policy M 3.1.5: Extended Light Rail Service.** Coordinate with Sacramento Regional Transit on possibilities for extending light rail hours into the evening.

**Policy M 3.1.6: "Hi-Bus" Transit Corridors.** Require sufficient right-of-way for designated Hi-Bus transit corridors that connect to light rail stations, including the planned facility on Easton Valley Parkway, south of Highway 50. The City shall also evaluate the feasibility of Hi-Bus transit in designated "study corridors" and shall give priority to transit uses within the available right-of-way in those study corridors. The City shall coordinate with Regional Transit to provide services in the Hi-Bus corridors.

**Policy M 3.1.7: Transit to Key Locations.** Provide Folsom Stage Line transit stops and associated amenities at key destinations in Folsom.

**Goal M 4.1:** Ensure a safe and efficient network of streets for cars and trucks, as well as provide an adequate supply of vehicle parking.

**Policy M 4.1.8: Energy Efficiency.** Use the most energy-efficient light fixtures and technology for all traffic signals, street lights, roads, intersections, and bicycle and pedestrian signals.

**Policy M 4.1.10: Traffic Calming.** Continue to implement traffic calming measures in residential neighborhoods, as appropriate and in ways that accommodate emergency access vehicles.

**Goal M 4.2:** Provide and manage a balanced approach to parking that meets economic development and sustainability goals.

**Policy M 4.2.1: Parking.** Maintain and implement a comprehensive on- and off-street parking system that serves the needs of residents and businesses while supporting the use of multiple modes of transportation.

**Policy M 4.2.2: Reduce Minimum Parking Standards.** Consider reducing parking standards for private vehicles in transit-oriented developments, mixed-use developments and developments in high-density areas over time, while increasing parking for shared vehicles, alternative energy vehicles, bicycles, and other modes of transportation. Reduced parking standards must be supported by a demand analysis that supports the reduction.

**Policy M 4.2.3: Shared Parking.** Consider the use of shared parking programs as conditions of approval in mixed use and transit-oriented neighbor-hoods and districts as a part of the overall parking management strategy. Shared parking may reduce the amount of parking spaces needed in new developments.

**Policy M 4.2.4: Electric Vehicle Charging Stations.** Encourage the installation of electric vehicle charging stations in parking spaces throughout the city.

**Policy M 6.1.3: Support Zero- and Low-Emission Vehicle Adoption.** The City shall continue to support rapid adoption of zero-emissions and low-emission vehicles by:

- installing public charging stations at City facilities,
- streamlining the permit-process for private electric vehicle charging stations (including home charging stations), and
- developing guidelines and standards for dedicated and preferential parking for zero and low-emissions vehicles (including charging stations for plug-in-electric vehicles, where necessary).

## ECONOMIC PROSPERITY ELEMENT

**Policy EP 3.2.2: Infill Sites.** Coordinate with interested developers and relevant public agencies to develop infill sites identified in the land supply inventory.

## NATURAL AND CULTURAL RESOURCES ELEMENT

**Goal NCR 1.1:** Protect and enhance Folsom's natural resources for current and future residents.

**Policy NCR 1.1.8: Planting in New Development.** Require the planting of street trees, parking lot canopy trees, screening trees, and other amenity trees and landscaping in all new development, consistent with City landscaping development guidelines, to minimize the heat island effect. Planting strips must be large enough to accommodate a large tree canopy and allow for healthy root growth.

**Policy NCR 3.1.3: Reduce Vehicle Miles Traveled.** Encourage efforts to reduce the amount of vehicle miles traveled (VMT). These efforts could include encouraging mixed-use development promoting a jobs/housing balance, and encouraging alternative transportation such as walking, cycling, and public transit.

**Goal NCR 3.2:** Improve the sustainability of the community through continued local efforts to reduce GHG emissions.

**Policy NCR 3.2.1: Community Greenhouse Gas Reductions.** Reduce community GHG emissions by 15 percent below 2005 baseline levels by 2020, and further reduce community emissions by:

- 40 percent below the 2020 target by 2030;
- 51 percent below the 2020 target by 2040, and
- 80 percent below the 2020 target by 2050.

**Policy NCR 3.2.2: Municipal Greenhouse Gas Reductions.** Reduce municipal GHG emissions by 15 percent below 2005 baseline levels by 2020, and further reduce municipal emissions by:

- 40 percent below the 2020 target by 2030;
- 51 percent below the 2020 target by 2040, and
- 80 percent below the 2020 target by 2050.

**Policy NCR 3.2.3: Greenhouse Gas Reduction in New Development.** Reduce greenhouse gas emissions from new development by encouraging development that lowers vehicle miles traveled (VMT), and discouraging auto-dependent sprawl and dependence on the private automobile; promoting development that is compact, mixed-use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio; and other methods of reducing emissions while maintaining the balance of housing types Folsom is known for.

**Policy NCR 3.2.4: Additional GHG Emissions Programs.** Continue to evaluate the feasibility and effectiveness of new policies, programs, and regulations that contribute to achieving the City's long-term GHG emissions reduction goals (see Policies NCR 3.2.1 and 3.2.2).

**Policy NCR 3.2.5: Climate Change Assessment and Monitoring.** Continue to assess and monitor performance of GHG emissions reduction efforts beyond 2020, including progress toward meeting long-term GHG emissions reduction goals for 2035 and 2050; as well as the

effects of climate change and associated levels of risk in order to plan a community that can adapt to changing climate conditions and be resilient to negative changes and impacts.

**Policy NCR 3.2.6: Coordination with SMAQMD.** Coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.

**Policy NCR 3.2.7: Preference for Reduced-Emission Equipment.** Require contractors to use reduced-emission equipment for City construction projects and contracts for services.

## PUBLIC FACILITIES AND SERVICES ELEMENT

**Goal PFS 3.1:** Maintain the City's water system to meet the needs of existing and future development while improving water system efficiency.

**Policy PFS 3.1.1: Water Master Plan.** Maintain and implement the Water Master Plan to ensure water facilities are adequate to meet existing customer needs and construct facilities to meet future needs.

**Policy PFS 3.1.2: Urban Water Management Plan.** Maintain and implement the Urban Water Management Plan to ensure the supply of water meets current and future customer demand as required by State law.

**Policy PFS 3.1.3: Water Efficient Landscape Ordinance.** Continue to require water efficient landscaping consistent with the Water Efficient Landscape Ordinance.

**Policy PFS 3.1.7: Water Supply.** Provide an adequate supply of water for all users in Folsom now and in the future.

**Policy PFS 3.1.9: Water Conservation Programs.** Promote water conservation through a variety of water conservation programs that include education and enforcement.

**Policy PFS 3.1.10: Water Conservation Standards.** Achieve a 20 percent reduction in per-capita water use by 2020 consistent with the State's 20x2020 Water Conservation Plan, Senate Bill SB X7-7 2009, and the City of Folsom Urban Water Management Plan.

**Policy PFS 3.1.12: Non-Potable Water.** Endeavor to provide non-potable water by ensuring new development south of Highway 50 is served by a non-potable water distribution system and seek sources of non-potable water for landscaping and other appropriate uses citywide.

**Goal PFS 7.1:** Prevent loss of life, injury, and property due to wildland and structural fires, while ensuring an adequate level of fire protection service is maintained for all.

**Policy PFS 7.1.1: Adequate Facilities and Services.** Strive to provide fire department facilities, equipment and vehicles, and services to adequately meet the needs of existing and future development.

**Goal PFS 8.1:** Provide for the energy and telecommunications needs of Folsom and decrease dependence on nonrenewable energy sources through energy conservation, efficiency, and renewable resource strategies now and in the future.

**Policy PFS 8.1.3: Renewable Energy.** Promote efforts to increase the use of renewable energy resources such as wind, solar, hydropower, and biomass both in the community and in City operations, where feasible.

**Policy PFS 8.1.4: Regional Energy Conservation.** Partner with neighboring jurisdictions and local energy utilities (e.g., SMUD and PG&E) to develop, maintain, and implement energy conservation programs.

**Policy PFS 8.1.5: PACE Program.** Assist in implementing the Property Assessed Clean Energy (PACE) financing programs to provide residential and commercial property owners with energy efficiency and renewable energy financing opportunities.

**Policy PFS 8.1.6: Energy-Efficient Lighting.** Reduce the energy required to light Folsom's parks and public facilities by employing energy-efficient lighting technology.

**Policy PFS 8.1.7: Energy Conservation in City Operations.** Strive to achieve an overall 20 percent reduction in City facility energy usage by continuing to install energy efficiency upgrades in City facilities (buildings, parks, and infrastructure) and implementing programs to measure and track energy usage in City facilities.

**Policy PFS 8.1.8: City Fleet Fuel Efficiency.** Strive to reduce consumption of carbon-intensive fuels related to business travel and fleet vehicles through the purchase of more efficient or alternative-fuel vehicles when buying new or replacement vehicles.

**Goal PFS 9.1:** Reduce the amount of waste entering regional landfills through an effective waste management program.

**Policy PFS 9.1.2: Waste Reduction.** Support efforts to reduce the amount of waste disposed of in landfills through reusing, reducing, and recycling solid waste; and using conversion technology if appropriate.

**Policy PFS 9.1.3: Recycling Target.** Support efforts to recycle at least 75 percent of solid waste by 2020.

**Policy PFS 9.1.4: Composting.** Provide green waste collection and offer compost education to divert organic material from local landfills.

## PARKS AND RECREATION ELEMENT

**Policy PR 1.1.5: Bicycle and Pedestrian Plan Consistency.** Require parks and recreation facilities be consistent with Folsom's Bikeway Master Plan and Pedestrian Master Plan and connect to the bikeway system whenever possible.

**Policy PR 1.1.9: Water-Wise Landscaping.** Employ low water use landscaping in the development of City parks.

**Policy PR 4.1.4: Connections**. Coordinate with Sacramento Regional Transit and the State Department of Parks and Recreation on establishing trail linkages from light rail stations in Folsom to Lake Natoma, Folsom Lake, and the American River Parkway.

## 12.2 ENVIRONMENTAL EFFECTS

### 12.2.1 SIGNIFICANCE CRITERIA

As set forth in Appendix G, Question VII of the State CEQA Guidelines, the following criteria have been established to quantify the level of significance of an adverse effect to climate change evaluated pursuant to CEQA. An impact would exceed a significance threshold under these circumstances:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment *(VII.a)*.
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs *(VII.b)*.

To set the stage for how California would meet targets set forth by SB 32, CARB adopted the 2017 Scoping Plan, which recommends an approach for local plan-level projects to show consistency with State targets. The following is related to local plan-level CEQA analyses (CARB 2017:99):

> CARB recommends statewide targets of no more than six metric tons $CO_2e$ per capita by 2030 and no more than two metric tons $CO_2e$ per capita by 2050. The statewide per capita targets account for all emissions sectors in the State, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term State emissions reduction goal of 80 percent below 1990 levels by 2050.

Based on the above, adopting a plan that results in no more than 6 $MTCO_2e$ per capita by 2030 and no more than 2 $MTCO_2e$ per capita by 2050 would not result in a substantial increase in GHGs or conflict with local or State plans adopted for reducing GHG emissions.

The project is anticipated to be built out in 2035, beyond the target year of 2030. Thus, to evaluate future GHG emissions and consistency with adopted state plans and policies, the CARB-recommended per capita and mass emissions goals for 2030 and 2050 were interpolated to obtain the 2035 annual per capita efficiency metric of 4.6 $MTCO_2e$ for project buildout. To evaluate future target year 2050, the per capita limit of 2 $MTCO_2e$ was considered. In addition to community wide emissions, municipal operations were also evaluated. Based on state reduction goals of 40 percent below state 1990 levels by 2030, GHG emissions targets were derived for the municipal operation of Folsom for the project buildout year of 2035 and 2050, 3,511 $MTCO_2e$/year and 1,663 $MTCO_2e$/year, respectively.

For purposes of this analysis, GHG emissions would be considered significant if they would exceed the following thresholds:

- Community emissions of 570,447 $MTCO_2e$/year or 6 $MTCO_2e$ per capita, consistent with State per capita limits for 2030.
- City municipal operational-related emissions of 4,468 $MTCO_2e$/year, consistent with State targets of 40 percent below 1990 levels by 2030.
- Result in emissions beyond 2030 that may conflict with the State's ability to meet future 2050 emissions reduction goal of 2 $MTCO_2e$/year per capita.

### 12.2.2 ANALYSIS METHODOLOGY

The issue of global climate change is an inherently-cumulative issue, as the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's GHG emissions contribution to global climate change is addressed only as a cumulative impact.

The analysis in this section is consistent with the recommendations of the SMAQMD's Guide to Air Quality Assessment in Sacramento County, Chapter 9, "Program-Level Analysis of General Plans and Area Plans" (SMAQMD 2016). The analysis primarily focuses on the extent to which the proposed 2035 General Plan would conflict with a plan for reduction of GHG emissions as defined by CEQA Guidelines Section 15183.5.

Based on population and employment growth projections for the City of Folsom, emissions forecasts for the buildout year of 2035 were prepared using the 2014 emissions inventory as a baseline. In addition, the regional travel demand model for the Sacramento Area Council of Governments (SACOG) region, known as SACMET, was used to estimate projected travel demand and VMT estimates for 2036 (and scaled back to 2035 using Folsom growth projections), which served as the basis for the mobile-source GHG emissions forecast. SACMET was updated to reflect current demographic projections in the SACOG region, including the City of Folsom. Thus, mobile-source GHG emissions reflect land use and growth projections consistent with SACOG's 2036 VMT forecasts.

Projected VMT under 2035 General Plan conditions was obtained from the SACMET travel demand model based on the VMT attribution methodology known as the "Origin-Destination" method (DKS 2017), as recommended by the CARB-appointed Regional Targets Advisory Committee (RTAC) for purposes of evaluating transportation plan consistency with SB 375 requirements. Mobile-source GHG emissions associated with VMT attributable to the City were modeled using CARB's Mobile Source Emission Factor Model (EMFAC 2014).

The GHG emissions associated with other sectors (e.g., building energy, solid waste, water and wastewater consumptions) are directly correlated to population growth and anticipated land use development for the 2035 General Plan (Mintier Harnish 2017). Additional information regarding methodology used in the GHG emissions inventory, projections, and GHG emissions reductions for all sectors are included in Appendix G of this DEIR.

The 2035 General Plan provides a framework of strategies, measures, and supporting efforts to reduce GHG emissions consistent with the state's GHG reduction goals. The 2035 General Plan is intended to serve as a "plan for the reduction of GHG emissions" consistent with Section 15183.5 of the CEQA Guidelines. Proposed policies and programs in the 2035 General Plan were evaluated for their ability to reduce GHG emissions. Emissions reductions associated with all proposed policies and programs were quantified for the 2035 buildout year and compared to the state's GHG reduction targets and effective plan-level thresholds, as described above under Section 5.2.1.

### 12.2.3 LESS-THAN-SIGNIFICANT IMPACTS

There are no impacts of this type for this issue area.

### 12.2.4 POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS

The following discussion examines the potential impacts of the proposed project based on the impact threshold criteria described above.

| **Impact GHG-1 Potential to conflict with an applicable plan, policy, or regulation adopted for reducing GHG emissions.** | |
|---|---|
| Applicable Regulations | See Table 12.3 |
| Proposed GP Policies that Reduce Impacts | See Table 12.3. |
| Significance after Implementation of GP Policies | Significant; mitigation required. |
| Mitigation Measures | GHG-1: Add new Implementation Program PFS-22 Renewable Energy in City-Operated Facilities<br>GHG-2: Add new Policy PFS 8.1.9 Water Heater Replacement<br>GHG-3: Add new Implementation Program PFS-23 High-Efficiency or Alternatively-Powered Water Heater Replacement Program<br>GHG-4: Add new Implementation Program PFS-24 Energy Efficiency and Renewable Energy Retrofits and Programs<br>GHG-5: Amend Policy LU 1.1.13 Sustainable Building Practices<br>GHG-6: Add new Implementation Program LU-6 Encourage Green Building<br>GHG-7: Add new Implementation Program LU-7 Encourage Zero Net Energy<br>GHG-8: Add new Implementation Program PFS-25 Zero Net Energy Development<br>GHG-9: Add new Implementation Program PFS-26 Renewable Diesel<br>GHG-10: Amend Implementation Program M-1 Transportation Demand Management<br>GHG-11: Amend Implementation Program PFS-14 Energy Efficient Fleet<br>GHG-12: Amend Policy M 1.1.4 Existing Streets Retrofits<br>GHG-13: Amend Implementation Program M-8 Bicycle and Pedestrian Funding<br>GHG-14: Amend Policy PFS 9.1.3 Recycling Target<br>GHG-15: Add new Implementation Program PFS-27 Reduce Water Consumption in New Development<br>GHG-16: Add new Policy NCR 3.2.8 GHG Analysis Streamlining for Projects Consistent with the General Plan |
| Significance after Mitigation | Less than significant. |

Implementation of the proposed 2035 General Plan would lead to urban development that would result in construction- and operation-related GHG emissions that would contribute to climate change on a cumulative basis. Detailed construction information for individual projects is unknown at this time, but would typically involve use of heavy-duty equipment, construction worker commute trips, material deliveries, and vendor trips. These activities would result in GHG emissions limited in duration for any given project, but when taken together over buildout of the 2035 General Plan, could be considerable.

Long-term operational sources of GHG emissions associated with the 2035 General Plan would include mobile sources (e.g., vehicle exhaust), energy consumption (e.g., electricity and natural gas), solid waste (e.g., emissions that would occur at a landfill associated with solid waste decomposition), wastewater treatment, and water consumption (e.g., electricity used to deliver and treat water consumed by customers in the City).

The City of Folsom is committed to reduce long-term increases in communitywide and municipal GHG emissions. Table 12-3 includes policies from the 2035 General Plan that demonstrate the City's intent to reduce GHG emissions and associated contribution to the cumulative impact of global climate change. A discussion for each policy and its implications for reducing GHG emissions is also provided.

**Table 12-3 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Greenhouse Gas Emissions**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| **FEDERAL REGULATIONS** | |
| *National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks* | Sets nationwide fuel efficiency standards, resulting in reduced vehicular exhaust GHG emissions. |
| **STATE REGULATIONS** | |
| *Advanced Clean Cars Program* | Imposes vehicle emissions standards to reduce on-road vehicle-related GHG emissions. |
| *Senate Bill X1-2, the California Renewable Energy Resources Act of 2011, and Senate Bill 350* | Requires energy providers in California to achieve 33 percent renewable electricity generation portfolio by 2020, and 50 percent renewable electricity generation portfolio by 2030. Results in reduction in energy-related GHGs associated with increased renewable electricity generation sources. |
| *California Building Efficiency Standards of 2016 (Title 24, Part 6)* | Sets energy efficiency standards for all new residential and nonresidential buildings constructed in California. Reduces energy-related GHG emissions due to increasingly strict energy efficiency standards. |
| *California Integrated Waste Management Act* | Requires all jurisdictions in California to divert solid waste from entering landfills, reducing methane-related off gassing emissions from decomposition in landfills. |
| **FOLSOM PLAN AREA SPECIFIC PLAN EIR/EIS** | |
| *Mitigation Measure 3A.4-1* | Requires construction operations in the FPASP to implement all SMAQMD recommended measures and ARB rules to reduce construction GHG emissions |
| *Mitigation Measure 3A.4-2a* | Requires that each project within the FPASP meet 2020 and 2030 State per capita GHG emissions standards via increased energy efficiency, water conservation and efficiency, solid waste measures, and transportation and motor vehicle standards and efficiencies. |
| *Mitigation Measure 3A.4-2b* | Requires that the sequestration capacity of existing trees lost to urban development within the FPASP area be offset through an Urban Forestry Program or Off-Site Tree Program. |
| **RUSSELL RANCH PROJECT EIR AND INITIAL STUDY** | |
| *Mitigation Measure 3A.2-2* | Requires compliance with an AQMP was prepared for the FPASP and Russell Ranch projects that included numerous measures intended to improve air quality, which also result in GHG emissions reductions. |
| **2035 GENERAL PLAN GOALS AND POLICIES** | |
| *Policy LU 1.1.6: Compact Development Patterns* | Compact development patterns promote walking, bicycling, and transit use, resulting in reductions in VMT and associated vehicle exhaust GHG emissions. |
| *Policy LU 1.1.7: Concentrated Development* | Compact and clustered development patterns promote walking, bicycling, and transit use, resulting in reductions in VMT and associated vehicle exhaust GHG emissions. |

**Table 12-3 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Greenhouse Gas Emissions**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| *Policy LU 1.1.12 Infill Development* | Locating development in suitable infill sites, near existing development and transit services can promote the use of existing transit modes and existing community amenities (e.g., medical, retail, grocery stores), resulting in a decrease in VMT as compared to siting new development further away from these amenities, requiring people to drive further. Reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy LU 1.1.13 Sustainable Building Practices* | Improved building energy efficiency, improved water efficiency, and increasing the use of sustainable building materials and construction practices results in less energy-related, water-related, and solid waste GHG emissions |
| *Policy LU 3.1.1 Mixed-Use Nodes* | Mixed-use development focuses on locating various amenities (e.g., retail, jobs, entertainment, residential) in close proximity to each other, promoting the use of alternative transportation to vehicle or reducing trip lengths, which reduces VMT. A reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy LU 3.1.5 East Bidwell Street* | Establishes a portion of the City to focus Mixed-Use development. Mixed-use development focuses on locating various amenities (e.g., retail, jobs, entertainment, residential) in close proximity to each other, promoting the use of alternative transportation to vehicle or reducing trip lengths, which reduces VMT. A reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy LU 3.1.6 Central Commercial District* | Establishes a portion of the City to focus Mixed-Use and commercial development. Mixed-use development focuses on locating various amenities (e.g., retail, jobs, entertainment, residential) in close proximity to each other, promoting the use of alternative transportation to vehicle or reducing trip lengths, which reduces VMT. A reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy LU 4.1.2 Mix of Uses Near Station* | New development located in close proximity to transit stations encourages the use of non-vehicle travel and reduces VMT. A reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy LU 4.1.3 Maximize TOD-Related CEQA Streamlining Benefits* | Encourages high density development in prioritized locations near existing and future planned transit services. Transit supportive development located in close proximity to transit stations encourages the use of non-vehicle travel and reduces VMT. A reduction in VMT results in reduced vehicle exhaust emissions. |
| *Policy 4.1.4: Restrict Auto-Oriented Uses Around Transit Stations* | Restricting auto-oriented uses near transit stations encourages increased transit use and reduces VMT. A reduction in VMT results in reduced vehicle exhaust emissions. |
| *Policy LU 4.1.5 Connections Between Modes* | Providing connections between transportation modes (e.g., bicycle parking, bus stops), promotes the use of walking, bicycle, and transit use, resulting in reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy LU 6.1.1 Complete Neighborhoods* | Complete neighborhoods can promote walkability and safety. Increased walking can result in reduced VMT or shorter trip lengths and associated reduction in vehicular-related GHG exhaust emissions. |
| *Policy LU 6.1.3 Efficiency Through Density* | Higher density development patterns promote walking, bicycling, and transit use, resulting in reductions in VMT and associated vehicle exhaust GHG emissions. |
| *Policy LU 6.1.10 Enhanced Walking and Biking* | Providing bicycle and pedestrian amenities (e.g., bicycle lanes, traffic calming measures, signage), promotes walking, and bicycle use, resulting in reductions in VMT and associated vehicle-related GHG emissions. |
| *Policy LU 8.1.5 Transit* | Locating new employment uses near transit can promote the use of mass transit for work-commute, reducing VMT and associated vehicle-related GHG emissions. |

**Table 12-3 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Greenhouse Gas Emissions**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| *Policy LU 9.1.3 Eliminate Large Blocks* | Reducing or removing existing barriers to pedestrian and bicycle access can promote these modes of transportations, reducing VMT and associated vehicle-related GHG emissions. |
| *Policy LU 9.1.5 Pedestrian-Friendly Entrances* | Improving pedestrian access and safety on streets and sidewalks can promote walkability, reducing VMT and associated vehicle-related GHG emissions. |
| *Policy LU 9.1.8 Cool Paving* | Cool paving materials can reflect some of the sun's rays, reducing temperatures in the surrounding area, resulting in reduced need for building energy use for cooling. Reduced building energy relates to reductions in GHG emissions associated with electricity and natural gas consumption. |
| *Policy LU 9.1.9 Passive Solar Access* | Increasing the use of passive solar design elements can result in reductions in mechanical space heating and cooling through the use of passive design elements such as daylighting, increasing thermal mass, and other strategies, thereby reducing building-related energy consumption and associated GHG from electricity use and natural gas combustion. |
| *Policy LU 9.1.10 Renewable and Alternative Energy Generation Systems* | Increased renewable and alternative energy generation reduces GHGs associated with fossil fuel combustion. |
| *Policy M 1.1.1 Complete Streets* | Streets that serve the needs of all users encourage walkability and bicycle use, resulting in a reduction in trips and/or VMT and associated GHGs. |
| *Policy M 1.1.2 Adequate Rights-of-Way* | Streets that serve the needs of all users encourage walkability and bicycle use, resulting in a reduction in trips and/or VMT and associated GHGs. |
| *Policy M 1.1.4 Existing Streets Retrofits* | Streets that serve the needs of all users encourage walkability and bicycle use, resulting in a reduction in trips and/or VMT and associated GHGs. |
| *Policy M 1.1.5 Connected Neighborhoods* | Providing street, bicycle, and pedestrian connectivity between existing and future development, promotes the use of walking, bicycle, and transit use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 1.1.6 Intermodal Connections* | Providing connections between transportation modes (e.g., bicycle parking, bus stops), promotes the use of walking, bicycle, and transit use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 1.1.7 Transportation System Management* | Implementing a TSM program can reduce peak hour trips and associated GHG emissions with vehicle use. |
| *Policy M 1.1.8 Intelligent Transportation Systems (ITS) Master Plan* | Implementing an ITS program can maximize the efficiency of the City's roadway, resulting in decreased delay and idling that can reduce GHG emissions associated with vehicle use. |
| *Policy M 1.1.9 Transportation Demand Management* | Implementing a TDM program can reduce vehicle trips and VMT, resulting in a reduction in associated GHG emissions with vehicle use. |
| *Policy M 1.1.10 Facilities for Emerging Technologies* | Providing cleaner fueling stations (e.g., electric, hydrogen) can promote the use of electric vehicles, reducing exhaust emissions associated with gasoline powered vehicles. |
| *Policy M 1.1.11 Historic Southern Pacific Rail Right-of-way* | Providing multi-modal transportation options can reduce VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.1 Pedestrian Master Plan* | Planning to improve the pedestrian network within the city can promote walkability, resulting in reduced VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.2 New Sidewalks* | Including pedestrian amenities such as sidewalks can improve the pedestrian network within the city can promote walkability, resulting in reduced VMT and associated vehicle-related GHG emissions. |

**Table 12-3 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Greenhouse Gas Emissions**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| *Policy M 2.1.3 Pedestrian and Bicycle Linkages in New Development* | Providing street, bicycle, and pedestrian connectivity between existing and future development and all land use types, promotes walking, biking, and transit use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.4 Sidewalk Network* | Including pedestrian amenities such as sidewalks can improve the pedestrian network within the city can promote walkability, resulting in reduced VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.5 Bikeway Master Plan* | Planning to improve the bicycle network within the city can promote bicycle use, resulting in reduced VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.10 Bicycle Parking* | Providing bicycle parking can encourage the use of bicycles within the city, resulting in reduced VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.11 Bicycle Parking at City Facilities* | Providing bicycle parking can encourage the use of bicycles within the city, resulting in reduced VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.12 Trail Network* | Providing street, bicycle, and pedestrian connectivity and trail networks between existing and future development and all land use types, promotes walking, biking, and transit use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.14 Intersections* | Safer intersections for all users encourages walking and biking, which can reduce VMT and associated vehicle-related GHG emissions. |
| *Policy M 2.1.17 Pedestrian and Bicycle Overpasses* | Providing street, bicycle, and pedestrian connectivity between existing and future development and all land use types, promotes walking and biking, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 3.1.1 Access to Public Transit* | Providing street, bicycle, and pedestrian connectivity between existing and future development and all land use types, promotes walking, biking, and transit use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 3.1.3 Regional Transit Connectivity* | Providing street, bicycle, and pedestrian connectivity between existing and future development and all land use types, promotes walking, biking, and transit use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 3.1.4 Light Rail Double-Tracking* | Improved transit operations and frequency can lead to additional ridership and reduced automobile use, resulting in a reduction in vehicle-related exhaust GHG emissions. |
| *Policy M 3.1.5 Extended Light Rail Service* | Increased transit operating hours can lead to additional ridership and reduced automobile use, resulting in a reduction in vehicle-related exhaust GHG emissions. |
| *Policy M 3.1.6 "Hi-Bus" Transit Corridors* | Providing additional transit lines can reduce VMT and associated vehicle-related GHG emissions. |
| *Policy M 3.1.7 Transit to Key Locations* | Providing additional transit lines can reduce VMT and associated vehicle-related GHG emissions. |
| *Policy M 4.1.8 Energy Efficiency* | Using high-efficiency lighting technologies reduces energy consumption and associated GHGs from electricity generation |
| *Policy M 4.1.10 Traffic Calming* | Providing bicycle and pedestrian amenities (e.g., bicycle lanes, traffic calming measures, signage), promotes walking and bicycle use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 4.2.1 Parking* | Parking management programs such as reducing minimum parking standards and increasing parking costs can reduce vehicle use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |

**Table 12-3 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Greenhouse Gas Emissions**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| *Policy M 4.2.2 Reduce Minimum Parking Standards* | Parking management programs such as reducing minimum parking standards can reduce vehicle use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 4.2.3 Shared Parking* | Parking management programs such as shared parking can reduce vehicle use, resulting in a reduction in VMT and associated vehicle-related GHG emissions. |
| *Policy M 4.2.4 Electric Vehicle Charging Stations* | Providing electric vehicle charging stations can promote the use of electric vehicles, reducing exhaust emissions associated with gasoline powered vehicles. |
| *Policy M 6.1.3 Support Zero- and Low-Emission Vehicle Adoption* | Providing electric vehicle charging stations can promote the use of electric vehicles, reducing exhaust emissions associated with gasoline powered vehicles. |
| *Policy EP 3.2.2 Infill Sites* | Locating development in suitable infill sites, near existing development and transit services can promote the use of existing transit modes and existing community amenities (e.g., medical, retail, grocery stores), resulting in a decrease in VMT as compared to siting new development further away from these amenities, requiring people to drive further. Reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy NCR 1.1.8 Planting in New Development* | Increased tree canopy cover provides additional shade, reducing temperatures in the surrounding area, resulting in reduced need for building energy use for cooling. Reduced building energy relates to reductions in GHG emissions associated with electricity and natural gas consumption |
| *Policy NCR 3.1.3 Reduce Vehicle Miles Traveled* | A reduction in VMT results in reduced vehicle exhaust GHG emissions. |
| *Policy NCR 3.2.1 Community Greenhouse Gas Reductions* | Sets the City on a path to reduce overall GHG emissions, consistent with State targets. |
| *Policy NCR 3.2.2 Municipal Greenhouse Gas Reductions* | Sets the City on a path to reduce overall GHG emissions associated with municipal operations, consistent with State targets. |
| *Policy NCR 3.2.3 Greenhouse Gas Reduction in New Development* | Mixed-use development focuses on locating various amenities (e.g., retail, jobs, entertainment, residential) in close proximity to each other, promoting the use of alternative transportation to vehicle or reducing trip lengths. A reduction in VMT results in reduced vehicle exhaust GHG emissions. High energy efficient buildings result in less energy consumption and/or more renewable or alternative energy source, reducing GHG emissions associated with electricity and natural gas use. |
| *Policy NCR 3.2.4 Additional GHG Emissions Programs* | Will promote the ongoing effort to seek new and additional programs or policies to reduce overall GHG emissions for the City. |
| *Policy NCR 3.2.5 Climate Change Assessment and Monitoring* | Will promote the ongoing effort to seek new and additional programs or policies to reduce overall GHG emissions for the City. |
| *Policy NCR 3.2.6 Coordination with SMAQMD* | Coordination with SMAQMD will ensure that future development complies with available GHG reduction measures. |
| *Policy NCR 3.2.7 Preference for Reduced-Emission Equipment* | Construction equipment generates GHG emissions from combustion of diesel and gasoline fuel. Replacing fossil fuel with electricity or alternative fuels, such as renewable diesel, will reduce GHG emissions associated with construction. |
| *Policy PFS 3.1.3: Water Efficient Landscape Ordinance* | Reduced water consumption reduces energy-related GHG emissions associated with the treatment and conveyance of water. |
| *Policy PFS 3.1.9 Water Conservation Programs* | Reduced water consumption reduces energy-related GHG emissions associated with the treatment and conveyance of water. |
| *Policy PFS 3.1.10 Water Conservation Standards* | Reduced water consumption reduces energy-related GHG emissions associated with the treatment and conveyance of water. |

**Table 12-3 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Greenhouse Gas Emissions**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| *Policy PFS 3.1.12 Non-Potable Water* | Increased use of non-potable water sources (e.g., on-site graywater reuse, rainwater capture) for landscaping may reduce the use of potable water and GHG emissions associated with energy used for treatment and distribution of potable water. |
| *Policy PFS 8.1.3 Renewable Energy* | Increased renewable and alternative energy generation reduces GHGs associated with fossil fuel combustion. |
| *Policy PFS 8.1.4 Regional Energy Conservation* | Will promote the ongoing effort to seek new and additional programs or policies to reduce overall GHG emissions for the City. |
| *Policy PFS 8.1.5 PACE Program* | Provides financial assistance for residents to participate in energy-saving programs, resulting in reduced building energy and associated GHGs from electricity generation and natural gas combustion. |
| *Policy PFS 8.1.6 Energy-Efficient Lighting* | Converting lights to more efficient technologies reduces energy consumption and associated GHGs from electricity generation |
| *Policy PFS 8.1.8 City Fleet Fuel Efficiency* | Increased fuel efficiency and alternatives fuels reduce vehicle-related exhaust GHG emissions. |
| *Policy PFS 9.1.2 Waste Reduction* | Reduces waste sent to landfills, reducing methane-related off gassing emissions from decomposition in landfills. |
| *Policy PFS 9.1.3 Recycling Target* | Reduces waste sent to landfills, reducing methane-related off gassing emissions from decomposition in landfills. |
| *Policy PFS 9.1.4 Composting* | Reduces waste sent to landfills, reducing methane-related off gassing emissions from decomposition in landfills. |
| *Policy PR 1.1.5 Bicycle and Pedestrian Plan Consistency* | Planning to improve the bicycle and pedestrian network within the city can promote bicycle use, resulting in reduced VMT and associated vehicle-related GHG emissions. |
| *Policy PR 1.1.9 Water-Wise Landscaping:* | Low-water requiring landscape reduced water consumption and energy-related GHG emissions associated with the treatment and conveyance of water. |
| *Policy PR 4.1.4 Connections* | Improved connections between transit modes encourages the use of pedestrian, bicycle, and transit infrastructure leading to reduced VMT. A reduction in VMT results in reduced vehicle exhaust GHG emissions. |

*Source: Ascent Environmental, Inc. 2018.*

As discussed above in Table 12-3, the 2035 General Plan provides numerous policies that are either intended to reduce GHG emissions or may have GHG reduction co-benefits. However, in many cases, specific quantifiable performance measures or implementation programs have not been identified. Thus, without measurable GHG reduction performance standards and programs in place for all proposed policies and implementation programs, GHG emissions would continue to increase as the 2035 General Plan builds out, and future reductions needed to meet the City's GHG reduction targets would not occur without additional policies and implementation programs or modifications. Because GHG emissions reductions targets would not be met, this impact would be significant and implementation of the following mitigation measures would be necessary.

**Significance of Impact:** Significant.

***To reduce building energy-related GHG emissions, adopt the following mitigation measures:***

**Mitigation Measure GHG-1:**

Add new **Implementation Program PFS-22: Renewable Energy in City-Operated Facilities**.

Strive to supplement 25 percent of city-owned building energy demand through on-site or off-site renewable energy sources. On-site sources may include solar panels or other types of renewable energy systems on rooftops or parking areas, and on-site energy storage. Off-site sources could include combinations of equivalent renewable energy generation systems, power purchase agreements, or other off-site programs offered by energy utilities (e.g., SMUD's Greenergy or SolarShares programs).

**Implementing Policy:** PFS 8.1.3.

**Mitigation Measure GHG-2:**

Add new **Policy PFS 8.1.9 Water Heater Replacement.**

Encourage the use of high-efficiency or alternatively-powered water heater replacements at time of replacement in existing residential development.

**Mitigation Measure GHG-3:**

Add new **Implementation Program PFS-23 High-Efficiency or Alternatively-Powered Water Heater Replacement Program**.

Provide educational material and information on the City's website, as well as through the permit and building department, on the various high-efficiency and alternatively-powered water heat replacement options available to current homeowners considering water heater replacement; develop appropriate financial incentives, working with energy utilities or other partners; and, streamline the permitting process. Replacement water heaters could include high-efficiency natural gas (i.e., tankless), or other alternatively-powered water heating systems that reduce or eliminate natural gas usage such as solar water heating systems, tankless or storage electric water heaters, and electric heat pump systems.

**Implementing Policy:** PFS 8.1.9.

**Mitigation Measure GHG-4:**

Add new **Implementation Program PFS-24 Energy Efficiency and Renewable Energy Retrofits and Programs**.

Strive to increase energy efficiency and renewable energy use in existing buildings through participation in available programs. Actions include:

- Establish a dedicated City program with a clear intent to provide support and promote available green building and energy retrofit programs for existing buildings.
- Incentivize solar installation on existing buildings that undergo major remodels or renovations, and provide permit streamlining for solar retrofit projects.
- Provide rebates or incentives to existing SMUD customers for enrolling in the existing Greenergy program.
- Provide education to property owners on low-interest financing and/or assist property owners in purchasing solar photovoltaics through low-interest loans or property tax assessments.

- Continue to work with SMUD and other private sector funding sources to increase solar leases or power purchase agreements (PPAs).

**Implementing Policies:** PFS 8.1.3, PFS 8.1.5, PFS 8.1.4.

**Mitigation Measure GHG-5:**

Modify **Policy LU 1.1.13 Sustainable Building Practices.**

Promote and, where appropriate, require sustainable building practices ~~(e.g., LEED certification)~~ that incorporate a "whole system" approach to designing and constructing buildings that consume less energy, water, and other resources; facilitate natural ventilation; use daylight effectively; and, are healthy, safe, comfortable, and durable.

**Mitigation Measure GHG-6:**

Add new **Implementation Program LU-6 Encourage Green Building.**

Encourage new residential and non-residential construction projects to adopt and incorporate green building features included in the CALGreen Tier 1 checklist in project designs; and, encourage projects to seek LEED rating and certification that would meet equivalent CALGreen Tier 1 standards or better. Consider future amendments to City code to adopt CALGreen Tier 1 requirements consistent with State building code. For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, CALGreen Tier 1 compliance would be required.

**Implementing Policy:** LU 1.1.13.

**Mitigation Measure GHG-7**:

Add new **Implementation Program LU-7 Encourage Zero Net Energy.**

Encourage Zero Net Energy (ZNE) building design for new residential and non-residential construction projects. Consider future amendments to City code to adopt ZNE requirements consistent with the State building code. For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, achievement of ZNE would be required consistent with provisions in the State building code under California Code of Regulations, Title 24, Part 6.

**Implementing Policy:** LU 1.1.13.

**Mitigation Measure GHG-8:**

Add new **Implementation Program PFS-25 Zero Net Energy Development**.

Adopt an ordinance to require ZNE for all new residential construction by 2020 and commercial construction by 2030, in coordination with State actions to phase in ZNE requirements through future triennial building code updates.

**Implementing Policies:** NCR 3.2.3, LU 9.1.10, LU 1.1.13, LU 1.1.17.

*To reduce construction-related GHG emissions, adopt the following mitigation measures:*

**Mitigation Measure GHG-9:**

Add new **Implementation Program PFS-26 Renewable Diesel.**

Revise the City of Folsom's Standard Construction Specifications to require that all construction contractors use high-performance renewable diesel for both private and City construction projects. Phase in targets such that high-performance renewable diesel would comprise 50 percent of construction equipment diesel usage for projects covered under the specifications through 2030, and 100 percent of construction equipment diesel usage in projects covered under the specifications by 2035. For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, the use of high-performance renewable diesel would be required consistent with the above targets.

**Implementing Policy:** NCR 3.2.7.

*To reduce mobile-source GHG emissions, adopt the following mitigation measures:*

**Mitigation Measure GHG-10**:

Modify **Implementation Program M-1 Transportation Demand Management**.

Adopt a citywide Transportation Demand Management (TDM) program that encourages residents to reduce the amount of trips taken with single-occupancy vehicles. The program shall be designed to achieve an overall 15 percent vehicle mile traveled (VMT) reduction over 2014 levels and a 20 percent reduction in City-employee commute VMT. The City shall coordinate with employers to develop a menu of incentives and encourage participation in TDM programs.

**Implementing Policy:** M 1.1.9, NCR 3.1.3.

**Mitigation Measure GHG-11:**

Modify **Implementation Program PFS-14 Energy Efficient Fleet.**

Continue purchasing alternative fuel/technology vehicles when replacing vehicles in the City's existing municipal fleet. Use high-performance renewable diesel in 100 percent of existing (2014) and future diesel on-road vehicles and convert entire on-road gasoline vehicles to electric by 2035.

**Implementing Policy:** PFS 8.1.8.

**Mitigation Measure GHG-12:**

Modify **Policy M 1.1.4 Existing Streets Retrofits.**

Actively pursue funding to update existing streets and intersections with new bikeways, sidewalks, and exclusive transit lanes, where these facilities are designated in the Bikeway Master Plan, Pedestrian Master Plan, or Transit Master Plan.

**Mitigation Measure GHG-13:**

Modify **Implementation Program M-8 Bicycle and Pedestrian Funding.**

Identify regional, State, and federal funding sources to support bicycle and pedestrian facilities and programs to improve roadways and intersections by 2035. Actions include:

- Require bicycle and pedestrian improvements as conditions of approval for new development on roadways and intersections serving the project. Improvements may include, but are not limited to: on-street bike lanes, traffic calming improvements such as marked crosswalks, raised intersections, median islands, tight corner radii, roundabouts, on-street parking, planter strips with street trees, chicanes, chokers, any other improvement that focuses on reducing traffic speeds and increasing bicycle and pedestrian safety. For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, incorporation of applicable bicycle and pedestrian improvements into project designs or conditions of approval would be required.

- Based on the most recent citywide inventory of roadways and pedestrian/bicycle facilities, identify areas of greatest need, to focus improvements on first. Areas to prioritize include roadways or intersections with a lack of safety features, street where disruption in sidewalks or bicycle lanes occurs, areas of highest vehicle traffic near commercial centers and transit facilities, where increased use of pedestrian/bicycle facilities would be most used.

**Implementing Policies:** M 2.1.15, M 1.1.4, M 1.1.6, M 1.1.5, M 2.1.2, M 2.1.3, M 2.1.4.

***To reduce GHG emissions associated with solid waste disposal, adopt the folllwing mitigation measure:***

**Mitigation Measure GHG-14:**

Modify **Policy PFS 9.1.3 Recycling Target.**

Support efforts to ~~recycle at least 75 percent of solid waste by 2020.~~ achieve a citywide disposal rate of 1.5 pounds per person per day, exceeding statewide target of 2.7 pounds per person per day by 2035.

***To reduce water- and wastewater-related GHG emissions, adopt the following mitigation measure:***

**Mitigation Measure GHG-15:**

Add new **Implementation Program PFS-27 Reduce Water Consumption in New Residential Development**.

Encourage water efficiency measures for new residential construction to reduce indoor and outdoor water use. Actions include:

- Promote the use of higher efficiency measures, including: use of low-water irrigation systems, and installation of water-efficient appliances and plumbing fixtures;
- Measures and targets can be borrowed from the latest version of the Guide to the California Green Building Standards Code (International Code Council)

- For projects subject to CEQA seeking to streamline GHG analysis consistent with the general plan, compliance with CALGreen Tier 1 Water Efficiency and Conservation measures would be required.

**Implementing Policies:** PFS 3.1.3, PFS 3.1.9.

***To specify how GHG emissions reductions would be achieved for certain future projects seeking to streamline GHG analyses by demonstrating consistency with the General Plan, adopt the following mitigation measure:***

**Mitigation Measure GHG-16:**

Add new **Policy NCR 3.2.8: GHG Analysis Streamlining for Projects Consistent with the General Plan.**

Projects subject to environmental review under CEQA may be eligible for tiering and streamlining the analysis of GHG emissions, provided they are consistent with the GHG reduction measures included in the General Plan and EIR. The City may review such projects to determine whether the following criteria are met:

- Proposed project is consistent with the current general plan land use designation for the project site;
- Proposed project incorporates all applicable GHG reduction measures (documented in the Climate Change Technical Appendix to the General Plan EIR) as enforceable mitigation measures in the CEQA document prepared for the project; and,
- Proposed project clearly demonstrates the method, timing and process for which the project will comply with applicable GHG reduction measures and/or conditions of approval, (e.g., using a CAP/GHG reduction measures consistency checklist, mitigation monitoring and reporting plan, or other mechanism for monitoring and enforcement as appropriate).

**Environmental Effects of Measures:** Implementation of Mitigation Measures GHG-1 through GHG-15 would result in new policies and regulations for reducing GHG emissions. Measures include creating new programs or funding sources, updating the municipal code, and revising overall GHG reduction targets for various sectors. Implementation of the measures would not result in an expansion of the area within the Planning Area devoted to urbanized land uses, and would not act to increase the intensity of existing or planned land uses. These measures would not directly result in any increased construction activities or increases in operational-related GHG emissions. No environmental effects would occur beyond those identified in this PEIR.

**Level of Significance After Mitigation:** Less than significant.

With implementation of the identified mitigation measures, the proposed 2035 General Plan would contain a comprehensive strategy that achieves a communitywide GHG emission reduction target consistent with State targets (i.e., 40 percent below 1990 levels by 2030), and sets the City on course towards achieving ongoing GHG emission reductions in the future through the year 2050.

Further, per capita emissions for target year 2030 would be 5.9 $MTCO_2e$ under the 2035 General Plan and full implementation of the proposed mitigation measures identified above, which would be below the state-recommended limit of 6 $MTCO_2e$ per capita. In addition, emissions associated with

municipal operations would be consistent with State goals to achieve emission levels of 40 percent below 1990 levels, assuming full implementation of the proposed mitigation measures identified above. Thus, considering the established State targets set by SB 32 for 2030, the proposed 2035 General Plan would not conflict with any applicable plan, policy, or regulation adopted for reducing GHG emissions. With incorporation of Mitigation Measures GHG-1 through GHG-15, this impact would be reduced to a less-than-significant level.

| **Impact GHG-2 Potential to conflict with long-term statewide GHG emissions reduction goals for 2050** | |
|---|---|
| Applicable Regulations | See Table 12-3 |
| Adopted Mitigation Measures | FPASP Mitigation Measures 3A.4-1, 3A.4-2a, 3A.4-2b, Russell Ranch Mitigation Measure 3A.2-2 |
| Proposed GP Policies that Reduce Impacts | NCR 3.2.1 NCR 3.2.2, NCR 3.2.4, NCR 3.2.5 (See Table 12-3) |
| Significance after Implementation of GP Policies | Significant; mitigation required |
| Mitigation Measures | GHG-17: Amend Policy NCR 3.2.5 |
| Significance after Mitigation | Significant and unavoidable. |

As noted in the 2017 Scoping Plan, the long-term goal of achieving 2 $MTCO_2e$ per capita by 2050 represents the State's commitment to achieving its "fair share" of GHG emissions reductions required under the Paris Agreement, which identified scientifically-based global emissions levels required to put the world on track to limit global warming to below 2°C, thereby avoiding the most catastrophic and dangerous impacts of global climate change (CARB 2017: 99). Additionally, the 2020 and 2030 targets codified into State law per AB 32 and SB 32 were established consistent with the long-term trajectory of emissions reductions required to achieve the 2050 goal.

As discussed above under Impact GHG-1, adoption of the proposed 2035 General Plan and incorporation of Mitigation Measures GHG-1 through GHG-14 would result in emissions reductions that would ensure the City of Folsom would be consistent with the 2030 statewide emissions limit of 6 $MTCO_2e$ per capita. Proposed mitigation measures identified under Impact GHG-1 would result in substantial reductions in GHG emissions from various sectors by improving energy efficiency in existing buildings, expanding on renewable energy sources, requiring ZNE for all new buildings, reducing VMT through various measures and by focusing development in high-density nodes, reducing waste generation, and conserving water. As a result of these policies, programs, and mitigation measures GHG emissions, on a per capita basis, would continue to decline beyond 2030. As shown in Table 12-4, 2035 per capita emissions would be reduced to approximately 5.4 $MTCO_2e$ and 2050 per capita emissions would be reduced to approximately 5.0 $MTCO_2e$.

However, based on current emission estimates for the City of Folsom projected for 2035 and 2050, and considering the proposed policies, programs and mitigation measures above under Impact GHG-1, the 2035 General Plan would not result in sufficient GHG reductions for the City to meet the statewide emission reduction goal of 2 $MTCO_2e$ per capita by 2050. Additional technological advances across multiple sectors would be required to reduce emissions further, combined with additional regulatory actions at the State or federal levels that are currently unknown beyond the year 2030. The 2017 Scoping Plan only identifies known commitments and proposed actions that will be

taken by the State to achieve the 2030 target. Furthermore, the State has not yet proposed a detailed update to the scoping plan for future targets that may be adopted beyond 2030 on the path to meeting the 2050 goal. The City would need to continue to monitor the status of communitywide and municipal GHG emissions over time; monitor and report on progress toward achieving adopted GHG reduction goals, through implementation of the 2035 General Plan and future programs; and, identify new or modified GHG reduction measures that would achieve longer-term, post-2030 targets that may be set by the State or others in the future.

The City of Folsom 2035 General Plan includes policies NCR 3.2.1 and NCR 3.2.2, that require the City to achieve GHG emissions reductions that are consistent with State targets. Policies NCR 3.2.4 and NCR 3.2.5 would ensure the City continues to evaluate the feasibility and effectiveness of new policies, programs, and regulations that contribute to achieving the City's long-term GHG emissions reduction goals and will continue to assess and monitor performance of GHG emissions reduction efforts beyond 2030, including progress toward meeting long-term GHG emissions reduction goals for 2050; as well as the effects of climate change and associated levels of risk in order to plan a community that can adapt to changing climate conditions and be resilient to negative changes and impacts.

Nonetheless, despite all proposed mitigation and policies in place to continue to monitor and update the City's GHG Inventory and CAP, City of Folsom per capita emissions would not meet the long-term statewide emissions reduction goal of 2 $MTCO_2e$ by 2050, established by EO S-3-05 and recommended by CARB in the 2017 Scoping Plan. No additional mitigation or information regarding future available technology advancements or future State plans for achieving post-2030 emission reductions is available at this time that can be further quantified. This impact would be significant.

**Table 12-4 Summary of GHG Emissions and Reduction Measures Identified in General Plan and Mitigation Measures GHG-1 to GHG-17**

| Location in 2035 General Plan | GHG Reduction Measure Number and Description[2] | GHG Reduction ($MTCO_2e$/year) | | | |
|---|---|---|---|---|---|
| | | 2020 | 2030 | 2035 | 2050 |
| **Building Energy Sector** | | | | | |
| PFS 8.1.7[1] | E-5: Reduces energy use at City facilities by 20 percent below 2014 levels by 2035. | 388 | 876 | 1,180 | 1,847 |
| PFS 8.1.3, Program PFS-22 | E-6: Sets City goal to supplement 25 percent of the City's operational electricity with renewable energy sources by 2035. Renewable energy includes on-site generation or off-site purchase agreements. | 79 | 264 | 310 | 310 |
| PFS 8.1.9, Program PFS-23 | E-2: Applies GHG reductions associated with voluntary replacement of existing water heaters with high-efficiency and alternatively-powered water heaters. | 0 | 1,326 | 1,856 | 1,856 |
| PFS 8.1.5, PFS 8.1.4, Program PFS-24 | E-3: Assumes continued participation in existing energy efficiency upgrade programs and an increased participation rate into the future. | 48 | 574 | 623 | 623 |
| PFS 8.1.3, Program PFS-24 | E-4: Assumes continued participation in existing renewable energy retrofit programs and an increased participation rate into the future. | 1,844 | 3,328 | 3,325 | 3,324 |
| NCR 3.2.3, LU 9.1.10, LU 1.1.13, LU 1.1.17, Program PFS-25, Program LU-6 | E-1: Applies GHG reductions associated with building energy efficiency and renewable energy generation in new development through CALGreen Tier 1 and ZNE. | 262 | 1,501 | 2,171 | 4,048 |
| **Transportation Sector** | | | | | |
| LU 3.1.1, LU 3.1.5, LU 3.1.6, LU 4.1.2, LU 4.1.3, NCR 3.1.3 | T-1: Applies GHG reductions associated with reduction in VMT from development in mixed use nodes and near transit. | 2,038 | 3,722 | 4,373 | 3,869 |
| NCR 3.2.7, Program PFS-26 | T-6: Phases in requirements for use of high-performance renewable diesel in construction equipment | 0 | 5,116 | 22,196 | 28,330 |
| M 1.1.9, NCR 3.1.3, Program M-1 | T-3 and T-4: Implement TDM program to reduce VMT. | 0 | 742 | 1,140 | 1,324 |

**Table 12-4 Summary of GHG Emissions and Reduction Measures Identified in General Plan and Mitigation Measures GHG-1 to GHG-14**

| Location in 2035 General Plan | GHG Reduction Measure Number and Description[2] | GHG Reduction ($MTCO_2e$/year) | | | |
|---|---|---|---|---|---|
| | | 2020 | 2030 | 2035 | 2050 |
| M 1.1.10, M 4.2.4, M 6.1.3, Program M-3, Program M-4 | T-8: Installation of electric vehicle charging stations throughout city in commercial, office, and City facilities | 0 | 4,243 | 5,949 | 5,949 |
| PFS 8.1.8, Program PFS-14 | T-7: Requires City on-road fleet conversion to alternative fuel and use of high-performance renewable diesel. | 0 | 2,874 | 4,824 | 6,148 |
| M 2.1.15, M 1.1.4, M 1.1.6, M 1.1.5, M 2.1.2, M 2.1.3, M 2.1.4, Program M-8 | T-2: Sets goal for City to improve existing intersections/streets and requires future development to include pedestrian and bicycle amenities in streets and intersections. | 0 | 268 | 431 | 486 |
| M 4.2.1, M 4.2.2, M 4.2.3, Program M-11[1] | T-5: Reduces minimum parking requirements | 0 | 82 | 125 | 699 |
| **Solid Waste Sector** | | | | | |
| PFS 9.1.3, Program PFS-18, Program PFS-19, Program PFS-20, Program PFS-21 | SW-1 and SW-2: Sets reduced per person disposal rate target and implements composting program to divert food and green waste from landfills. | 6,279 | 11,793 | 15,400 | 19,482 |
| **Water/Waste Water Sector** | | | | | |
| PFS 3.1.3, PFS 3.1.9, Program PFS-27 | W-1 and W-2: Increases water efficiency and reduces outdoor water use in new residential development. | 0 | 293 | 309 | 394 |
| PFS 3.1.3, PFS 3.1.9, Program PFS-27 | W-3: Reduces water consumption at City facilities. | 416 | 357 | 360 | 487 |
| **Total Reductions** | | | | | |
| Total Reductions (Community) | | 11,355 | 37,360 | 64,575 | 79,179 |
| Total Reductions (Municipal) | | 908 | 4,649 | 7,224 | 9,572 |
| **Community Totals and Targets** | | **GHG Emissions ($MTCO_2e$/year)** | | | |
| Community Total (State regulations only) | | 636,389 | 594,745 | 617,192 | 738,467 |
| Community Emissions (all modified 2035 General Plan policies and State regulations) | | 625,034 | 557,385 | 552,617 | 659,288 |
| Community Emissions Target[1] | | 642,246 | 570,447 | 470,080 | 263,052 |
| Gap (Surplus) | | (17,212) | (13,061) | 82,537 | 396,236 |

| **Community Totals and Targets** | **GHG Emissions ($MTCO_2e$/year)** | | | |
|---|---|---|---|---|
| Per Capita Emissions | 7.7 | 5.9 | 5.4 | 5.0 |
| **Municipal Totals and Targets** | | | | |
| Municipal Total (State regulations only) | 7,889 | 8,196 | 8,852 | 11,086 |
| Municipal Emissions (all 2035 modified General Plan policies and State regulations) | 6,981 | 3,547 | 1,629 | 1,515 |
| Municipal Target | 7,291 | 4,468 | 3,511 | 1,663 |
| Gap (Surplus) | (310) | (921) | (1,882) | (149) |

Notes: GHG= greenhouse gas $MTCO_2e$= metric tons carbon dioxide equivalent
TDM= traffic demand management VMT= vehicle miles traveled
ZNE= zero net energy GHG= greenhouse gas
Folsom population growth based on buildout projections developed for the General Plan project (Mintier Harnish 2017).
Population data used for per capita emissions by year: 2020: 80,833; 2030: 95,074; 2035: 103,110; 2050: 131,526
[1]: Policies contained in the Draft General Plan and not recommended as mitigation, and have associated GHG reductions.
[2]: GHG Reduction Measure numbers in this table correspond with the GHG Reduction Measure numbers in Appendix G, *Climate Change*.
*Source: Ascent Environmental Inc. 2017*

**Significance of Impact:** Significant.

**Mitigation Measure GHG-17:**

Modify **Policy NCR 3.2.5 Climate Change Assessment and Monitoring.**

> Continue to assess and monitor performance of GHG emissions reduction efforts ~~beyond~~ for 2020, 2030, and beyond, including progress toward meeting longer-term GHG emissions reduction goals for 2035 and 2050 by reporting on the City's progress annually, updating the GHG inventory and forecasts at least every five years, and preparing updates to the GHG Strategy in the General Plan, as appropriate; as well as assess and monitor the effects of climate change and associated levels of risk in order to plan a community that can adapt to changing climate conditions and be resilient to negative changes and impacts.

**Level of Significance After Mitigation:** Significant and unavoidable.

Implementation of Mitigation Measure GHG-16 would ensure the City continues to monitor progress towards achieving adopted 2020 and 2030 GHG emissions reduction targets, as well as longer-term goals to 2050. Further, Mitigation Measure GHG-16 commits the City to updating their GHG Inventory and GHG Strategy contained within the 2035 General Plan to ensure that emissions reductions are achieved and sufficient to meet future goals or new targets that may be established by the State, and that the most current and feasible GHG emission reducing policies and programs are in place to reduce emissions. Nonetheless, because total GHG emissions reductions quantified to date for both the proposed GPU and mitigation measures identified above cannot demonstrate how the long-term statewide emissions reduction goal of 2 $MTCO_2e$ by 2050 would be achieved, this impact would remain significant and unavoidable.

| Impact GHG-3 Climate change adaptation | |
|---|---|
| Applicable Regulations | See Table 12-3. |
| Adopted Mitigation Measures | FPASP Mitigation Measures 3A.4-1, 3A.4-2a, 3A.4-2b, Russell Ranch Mitigation Measure 3A.2-2. |
| Proposed GP Policies that Reduce Impacts | See Table 12-5. |
| Significance after Implementation of GP Policies | Less than significant; no mitigation required. |

Human-induced increases in GHG concentrations in the atmosphere have led to increased global average temperatures through the intensification of the greenhouse effect, and associated changes in local, regional, and global average climatic conditions. Although there is strong scientific consensus that global climate change is occurring and is influenced by human activity, there is less certainty as to the timing, severity, and potential consequences of the climate phenomena. Scientists have identified several ways in which global climate change could alter the physical environment in California (CNRA 2012, California Department of Water Resources [DWR] 2006, IPCC 2007). These include:

- increased average temperatures;
- modifications to the timing, amount, and form (rain vs. snow) of precipitation;
- changes in the timing and amount of runoff;

- reduced water supply;
- deterioration of water quality; and
- elevated sea level.

Many of these phenomena would translate into a variety of issues and concerns that may affect the City of Folsom, including but not limited to:

- increased frequency and intensity of extreme heat days; and
- more intense variability in water supply, including more frequent or intense periods of drought;
- increased risk of wild fire due to changing precipitation and dryer conditions.

However, the 2035 General Plan contains numerous policies that will help the City prepare for and adapt to changing conditions. Table 12-5 below summarizes policies from the 2035 General Plan that address sustainability, including climate change adaptation and resiliency.

**Table 12-5 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Climate Adaptation**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| **2035 GENERAL PLAN GOALS AND POLICIES** | |
| *Policy LU 1.1.14 Promote Resiliency* | Will ensure that the City continues efforts to collaborate, inform, and educate residents of the issues surrounding global climate change. Increased awareness can lead to reduction is GHG emissions from individual actions and choices within the community. |
| *Policy NCR 3.2.5 Climate Change Assessment and Monitoring* | Commits the City to monitor the effects of climate change and associated risks to the community, which would result in continued efforts to provide adequate resources and plan accordingly. |
| *PFS 3.1.1 Water Master Plan* | Commits the City to maintain and implement the Water Master Plan to ensure water facilities are adequate. Long-term planning will help secure future water needs. |
| *PFS 3.1.2 Urban Water Management Plan* | Commits the City to maintain and implement the Urban Water Management Plan to ensure water facilities are adequate. Long-term planning will help secure future water needs. |
| *PFS 3.1.3 Water Efficient Landscape Ordinance* | Continuing to enforce water conservation techniques can help prepare for times when less water may be available due to changing precipitation patterns. |
| *PFS 3.1.7 Water Supply* | Commits the City to maintain adequate water supply. Long-term planning will help secure future water needs. |
| *PFS 3.1.9 Water Conservation Programs* | Continuing to enforce water conservation techniques can help prepare for times when less water may be available due to changing precipitation patterns. |
| *PFS 3.1.10 Water Conservation Standards* | Continuing to enforce water conservation techniques can help prepare for times when less water may be available due to changing precipitation patterns. |
| *PFS 3.1.13 Non-Potable Water* | Increasing the use of non-potable water (e.g., on-site graywater reuse or recycled water) may result in a decrease in the use of potable water, helping to preserve freshwater resources. As climate changes and impacts to water supply or increased severity and frequency of droughts could occur in the future, efficient use of water resources and alternative sources such as non-potable water is favorable. |

**Table 12-5 Regulatory Requirements and Proposed 2035 General Plan Goals/Policies Related to Climate Adaptation**

| Measure Identification | How the Regulation or Policy Avoids or Reduces Impact |
|---|---|
| *Policy PFS 7.1.1 Adequate Facilities and Services* | Ensuring that safety response personnel and resources are adequate will provide effective response and support to residents if new or increased severity in climate events occurs in the future. |
| *Policy SN 1.1.4 Multi-Hazard Mitigation Plan* | Will ensure the City will consider of the impacts of urbanization and climate change on long-term flood safety and long-term flood event probabilities. |
| *Policy SN 4.1.1 Defensible Space* | Planning for defensible space can help protect property and life in the event of wildland fires. |
| *Policy SN 4.1.2 Coordination* | Commits the City to plan and assess wildfire hazards before they occur. This will help ensure new development is not placed in high-risk areas. |
| *Policy SN 4.1.3 Community Wildfire Preparedness Plan* | The City will continue to plan and assess wildfire hazards before they occur. This will help ensure new development is not placed in high-risk areas. |

*Source: Ascent Environmental, Inc. 2017.*

As discussed above, the 2035 General Plan provides numerous policies that are intended to protect the City of Folsom and facilitate adaptation to changes in local conditions associated with climate change. This impact would be less than significant.

**Significance of Impact:** Less than significant.

**Mitigation Measure:** None required.